

Standard accessories

Operating Instructions (this document).....1 pc.

The following parts are used during installation procedures.

Attachment ring.....1 pc.	Waterproof tapes.....3 pcs.
Hexagonal socket head special screws (M6) ... 5 pcs. (of them, 1 for spare)	Extended safety wire1 pc. SFP packing.....1 pc.
Locking washers 5 pcs. (of them, 1 for spare)	

Other items that are needed (not included)

[1] Prepare four mounting screws (M10) to be mounted on ceiling or wall separately.

Installation method	Mounting screw	Minimum pull-out strength/ 1pcs.
When hanging the camera from ceiling Use the ceiling mount bracket (WV-Q121B").	M10 screws/ 4 pcs.	1977 N {444 lbf}
When installing the camera on a wall Use the wall mount bracket (WV-Q122A").	M10 screws/ 4 pcs.	1470 N {330 lbf}

*1 For details on procedure for attaching mount bracket and camera, read the operating instructions of each mount bracket.

[2] Prepare an SFP (Small Form Factor Pluggable) module (locally procured).

For latest information about compatible SFP modules, refer to our support website.
(https://i-pro.com/global/en/surveillance/training_support/support/technical_information <Control No.: C0504>).

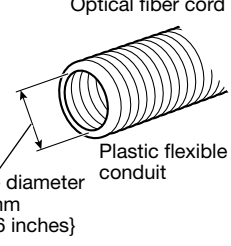
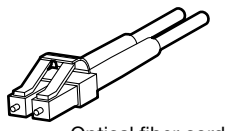
Note:

- Do not touch the metal terminal of the SFP module or bring an electrified object close to the terminal. Failure to observe this may cause malfunction due to static electricity.

[3] Prepare an optical fiber cord and a plastic flexible conduit.

① Examine the necessary length of the optical fiber cord.

- Check the position of the light termination box in which the optical fiber cable is laid.
- The necessary length of the optical fiber cord is calculated by adding the length between the light termination box and the camera attachment port of the mount bracket to approximately 240 mm {9-7/16 inches}.



② Prepare an optical fiber cord with an LC duplex connector (Herein after referred to as "LC connector". Please be careful not to confuse with "LC removal clip type connector".) that connects between the SFP module and light termination box.

Optical fiber cord: Use what is compatible with the SFP module in use.
Type of optical connector: LC connector (SFP module side)

Note:

- Do not remove the protective cap on the tip until immediately before connection to the SFP module.

③ Prepare a plastic flexible conduit equivalent to PF-14.

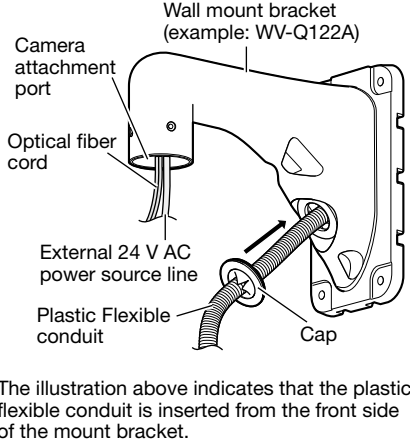
The plastic flexible conduit protects the optical fiber cord from the light termination box to mount bracket.

Installation

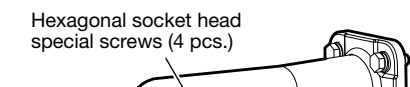
Here explains an example of installation on a wall using wall mount bracket (WV-Q122A). For detailed installation information and procedure, refer to the operating instructions of each mount bracket.

[1] Fix WV-Q122A on the wall.

- Make four holes in the wall to fix WV-Q122A.
If wiring is laid from the back side of the wall, make a hole for wiring, too.
(For the positions of the holes, refer to the Operating Instructions for WV-Q122A.)
- Pass the optical fiber cord and the external 24 V AC power source line through the plastic flexible conduit in advance.
- Assemble the connector part to the external 24 V AC power source line with the use of the 24 V AC power supply connector kit (camera accessory). For how to install the 24 V AC power supply connector kit, refer to "Making connections" in Installation Guide for the camera.
- Insert the plastic flexible conduit in which the optical fiber cord and the external 24 V AC power source line are and laid into the wall mount bracket from the front side, and bring them in the conduit to the camera attachment port.
- Adjust the length of each cord so that the distance from the camera attachment port as follows.
Optical fiber cord: approximately 240 mm {9-7/16 inches}
External 24 V AC power source line: approximately 200 mm {7-7/8 inches}
- Apply waterproof treatment to the drilled installation surface and the cap of the mount bracket frontside.
- Attach the wall mount bracket to wall surface using fixing screws (4 pcs.) (M10: locally procured).
Minimum pull-out strength (per 1 pc.) 1470 N {330 lbf}



The illustration above indicates that the plastic flexible conduit is inserted from the front side of the mount bracket.

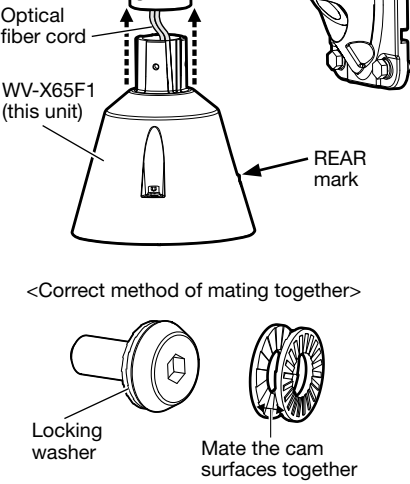


[2] Connect the optical fiber cord in the light termination box, connect the plastic flexible conduit in the light termination box, and apply waterproofing.

Connect the 24 V AC power source line that passes the plastic flexible conduit to the external power line separately.

[3] Take out this product and fix it to WV-Q122A with the four hexagonal socket head special screws (M6, accessories).

- Pass the optical fiber cord and the external 24 V AC power source line into this product.
Pass other cables into this product if necessary.
- Adjust the direction of this product so that the "REAR" mark on the back side of this product faces toward the wall mount bracket side.
- Fix this product to the wall mount bracket using a 4 mm {5/32} hex wrench (locally procured) with hexagonal socket head special screws (accessory) and locking washers (accessory).
Recommended tightening torque: 9.8 N·m {7.23 lbf·ft}
If two locking washers are released each other, be sure to mount them on the hexagonal socket head special screw in the direction shown in the illustration on the right side and use them.



IMPORTANT

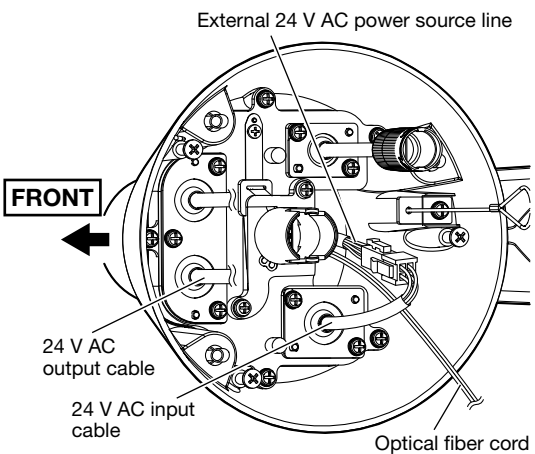
- Hexagonal socket head special screws included with camera cannot be used. Use the special hexagon screws and locking washers included with this product.

[4] Connect the external power source connector to the connector of the 24 V AC input cable of this product.

- Connect between the connector of the external 24 V AC power source line and the 24 V AC input cable of this product.
- Apply waterproofing to the connector/cable parts with the waterproof tape (accessory).

IMPORTANT

- The 24 V AC power supply shall be insulated from the commercial AC power.
- Stretch the tape by approx. twice and wind it around the connector and cable. Insufficient tape stretch causes insufficient waterproofing.



Note:

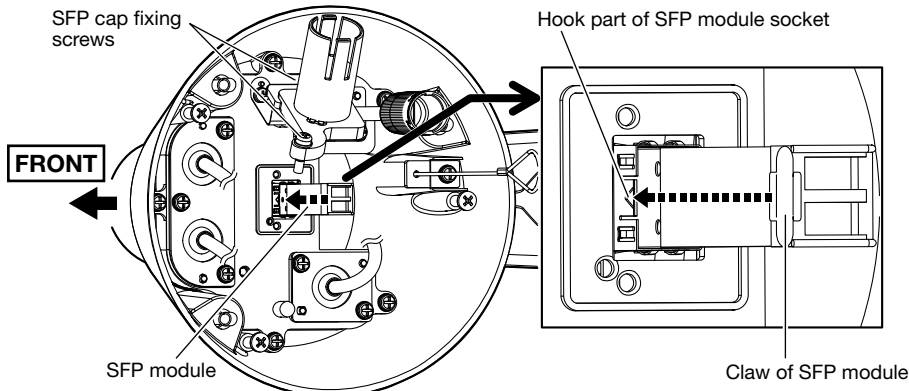
- This product is equipped with two cable connection terminals; one is "24 V AC input cable" that is connected to an external power source cable, and the other is "24 V AC output cable" that supplied the camera with power source. Be careful not to make improper connections.

CAUTION:

- A READILY ACCESSIBLE DISCONNECT DEVICE SHALL BE INCORPORATED TO THE EQUIPMENT POWERED BY 24 V AC POWER SUPPLY.
- ONLY CONNECT 24 V AC CLASS 2 POWER SUPPLY (UL1310/CSA 223) or LIMITED POWER SOURCE (IEC/EN/UL/CSA 60950-1).

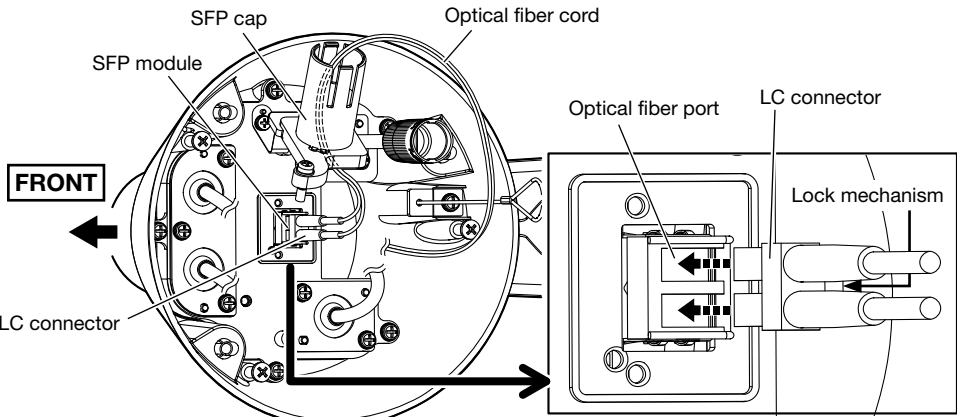
[5] Install the SFP module on this product.

- Loosen the SFP cap fixing screws (2 positions) with a screwdriver, and remove the SFP cap (transparent) from this product.
- Install the SFP module inside SFP module socket.



[6] Connect the optical fiber cord to the SFP module.

- Pass the optical fiber cord through SFP cap, and push the LC connector of the optical fiber cord into the optical fiber port of the SFP module until the lock mechanism works.
- Put SFP cap back to the original position. Recommended tightening torque: 1.38 N·m {1.02 lbf·ft}

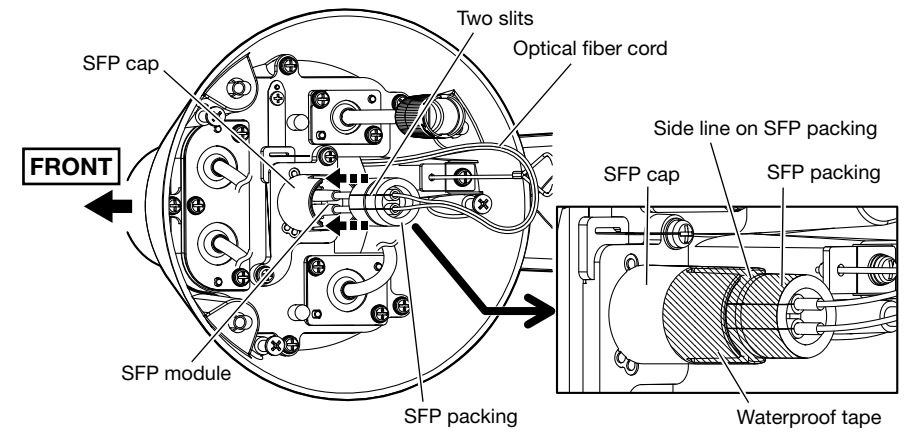


Note:

- The optical fiber port of the SFP module and the LC connector of the optical fiber cord have the protective cap, respectively. Remove the protective caps from them and connect them.
- When an optical fiber cord is connected to the SFP module, make sure that the connecting part of the optical fiber cord is not dirty.
- Do not bend or tie the optical cables. Set the minimum radius to 30 mm {1-3/16 inches} or more and conduct wire processing.

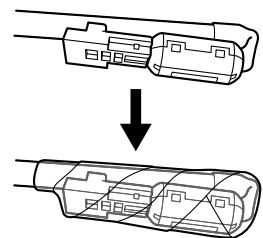
[7] Apply waterproofing to the optical fiber cord inserted in SFP cap.

- Pass the optical fiber cord into the two slits in SFP packing to mount SFP packing on the optical fiber cord.
- Insert SFP packing so that the side line on SFP packing is aligned with the tip of SFP cap.
- Apply waterproofing to SFP cap and SFP packing by winding the waterproof tape (accessory) around them. Refer to the bottom right illustration for a part where the waterproof tape is to be applied. Be also sure to apply waterproof treatment with silicon waterproof material to the SFP packing where the optical fiber cord is inserted.



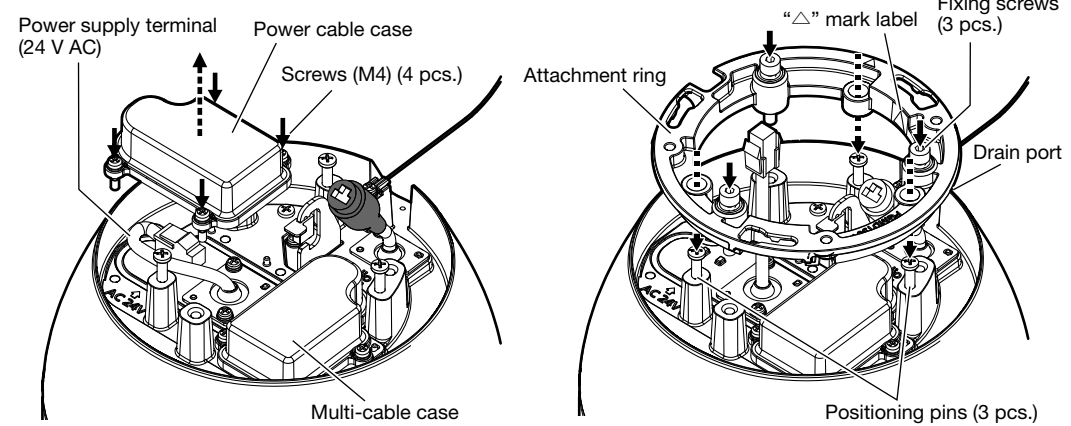
[8] Apply waterproofing to the 12 V DC output cable from this product.

The 12 V DC output cable from this product is not used. Apply waterproofing to the connecting part with the waterproof tape (accessory).



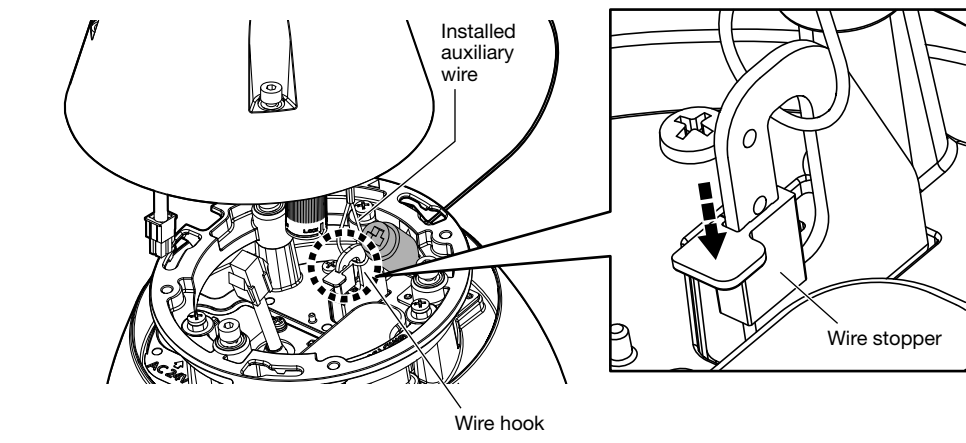
[9] Mount the attachment ring (accessory) on the camera.

- Before performing the following tasks, store the camera in the packing box of this product to stand the camera. Refer to the figure of the packing box of this product.
- Remove the power cable case secured to the upper side of the camera with four screws (M4), and pull out the power supply terminal (24 V AC) stored inside. Dispose of the removed power cable case.
- If the audio input cable, audio output cable, or alarm input/output cable, remove the multi-cable case, too.
- Attach the attachment ring while facing the △ mark label to the rear of the camera (in a direction having the drain port) and fix the attachment ring to the upper side of the camera with the use of 5 mm {3/16 inch} hex wrench (locally procured).
Recommended tightening torque: 2.45 N·m {1.81 lbf·ft}



[10] Hang the camera on the installed auxiliary wire of this product.

- Carry the camera to the installation position, and hang the camera on the installed auxiliary wire.
- Lower the wire stopper to prevent the installed auxiliary wire from coming off.

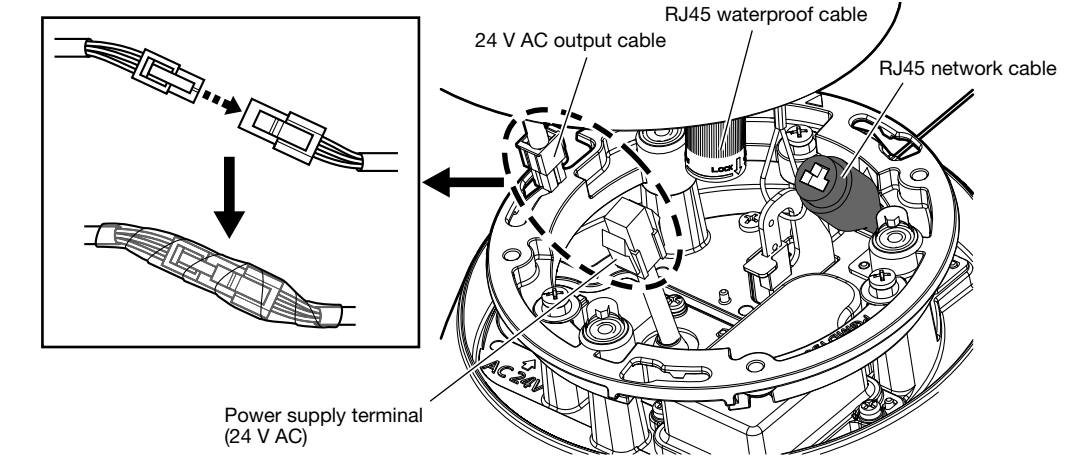


Note:

- The camera is not secured temporarily, and therefore, be careful not to let the camera hit surroundings.
- The installed auxiliary wire is designed to hang only the camera body. Do not put an excessive weight that the installed auxiliary wire cannot support.

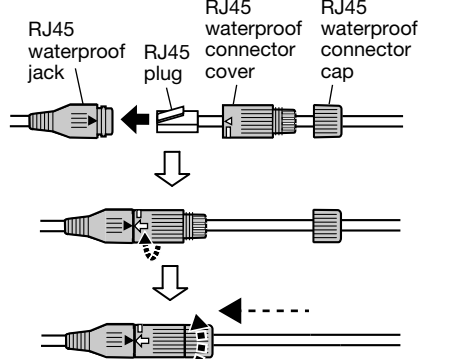
[11] Connect between the 24 V AC output cable of this product and the power supply terminal (24 V AC) of the camera.

Connect between the 24 V AC output cable of this product and the power supply terminal (24 V AC) of the camera, and apply waterproofing to the connection part and surrounding cable parts with the waterproof tape (accessory).



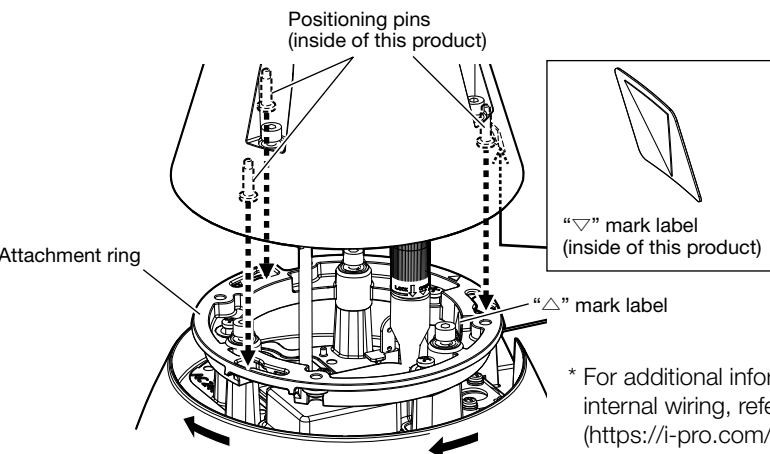
[12] Connect the RJ45 waterproof cable of this product to the RJ45 network cable of the camera.

- Loosen the RJ45 waterproof connector cap by rotating it counterclockwise and slide both the RJ45 waterproof connector cap and the RJ45 waterproof connector cover as shown in the illustration on the right.
- Insert the RJ45 plug into the RJ45 waterproof jack of the camera.
- Engage the RJ45 waterproof connector cover with the RJ45 waterproof jack, and rotate the RJ45 waterproof connector cover to match the ◀ mark to the counterpart.
- Rotate the RJ45 waterproof connector cap until the gap between it and the RJ45 waterproof connector cover is eliminated.



[13] Fix the camera to this product.

- Adjust the camera position so that the △ mark label at the back side of attachment ring is matched with the ▽ mark label at the rear inner side of this product.
- Insert the positioning pins of this product into the mounting holes (3 positions) in attachment ring at the upper part of the camera, and rotate the camera approximately 15 degrees counterclockwise in underneath view to fix it temporarily.



* For additional information about how the internal wiring, refer to our web site (https://i-pro.com/global/en/surveillance/training_support/support/technical_information <Control No.: C0506>).

Note:

- When lifting the camera, do not hold the moving part.
- Put the installed auxiliary wire or other wire parts inside attachment ring to prevent them from being caught in the periphery of this product.
- Do not put the RJ45 waterproof connector part on the multi-cable case.
- Be careful not to apply a strong force to the optical fiber cord when inserting it in order to prevent the cord from being bent during the installation work.

[14] Tighten the three hexagonal socket head special screws (fixing screws) firmly with the use of a 4 mm {5/32} hex wrench (locally procured).

Recommended tightening torque: 2.45 N·m {1.81 lbf·ft}

[15] Fix the safety wire of the camera to the mount bracket.

Attach the safety wire of the camera body to the wire hook section of WV-Q122A.
Refer to the operating instructions for each mount bracket for further information about where to connect the safety wire.

Note:

- If the safety wire is not long enough, connect the extended safety wire (accessory) to the snap hook of the safety wire.

