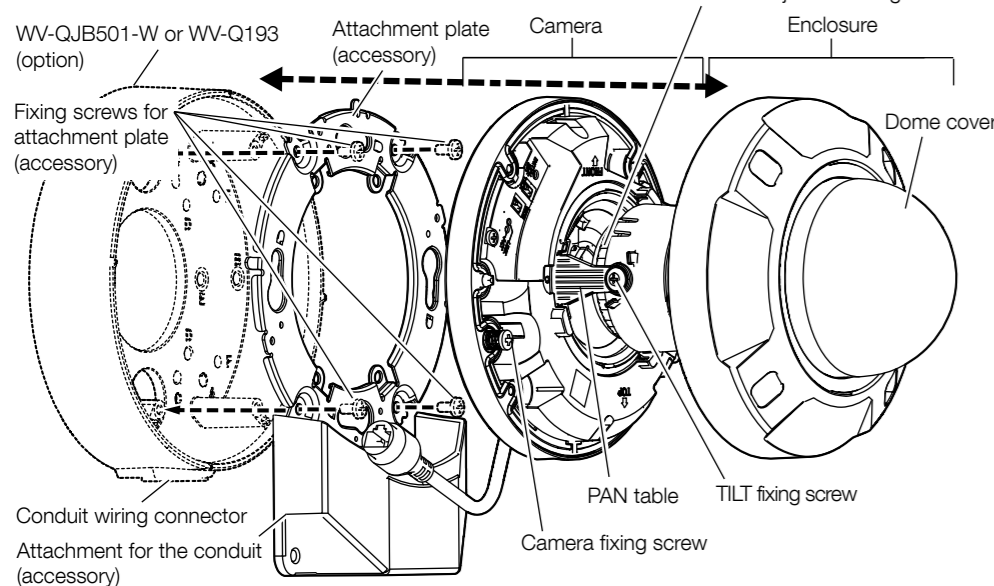
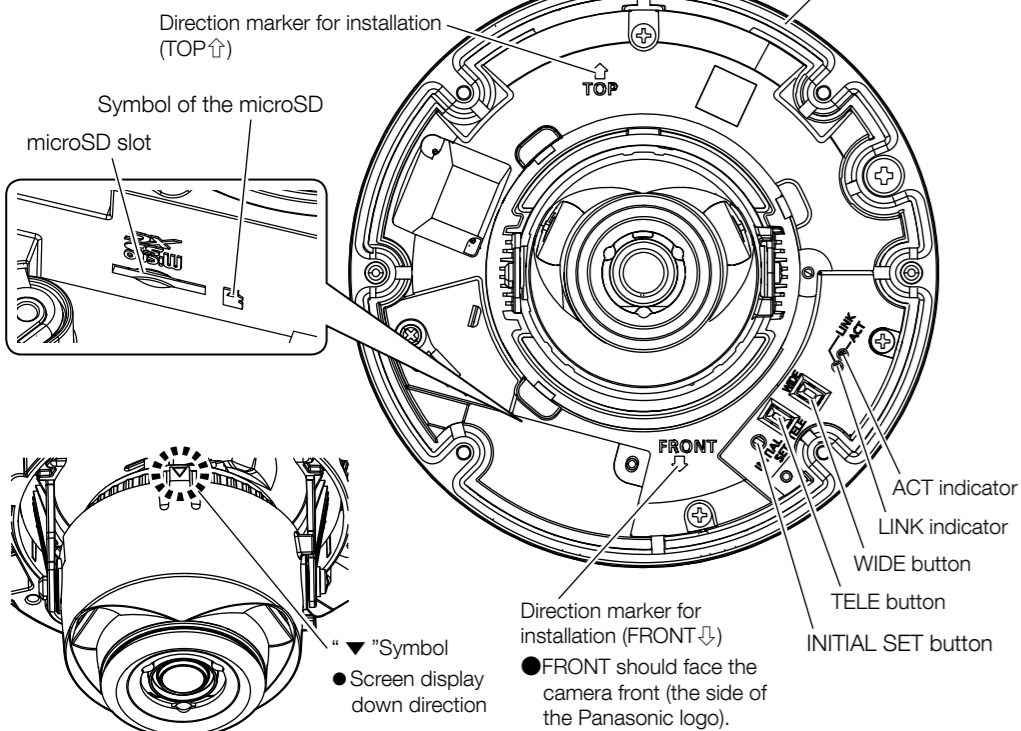


Parts and functions

<Whole unit>



<Camera body>



■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

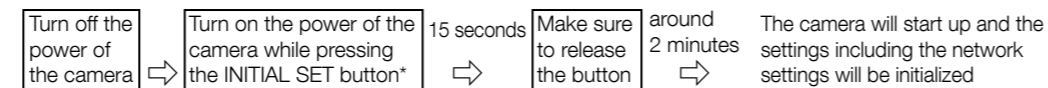
ACT indicator

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.

•TELE button

Click the TELE button to adjust the zoom ratio to the "Tele" side.

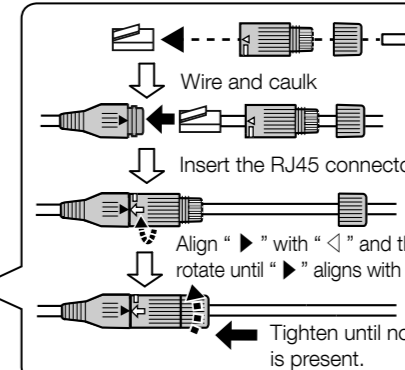
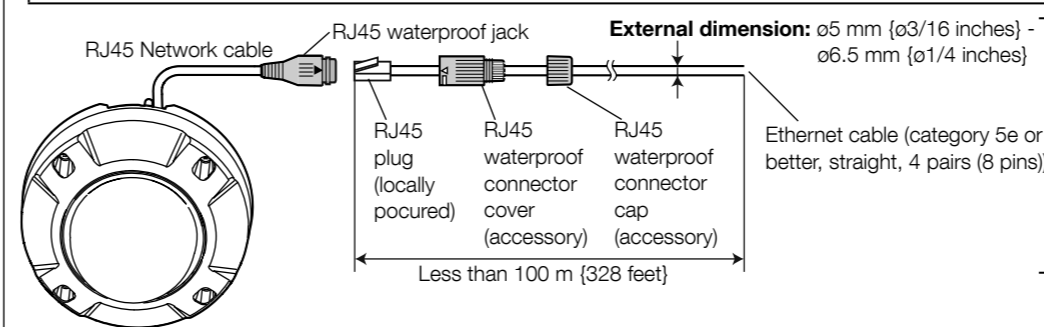
•WIDE button

Click the WIDE button to adjust the zoom ratio to the "Wide" side.

Step2 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.

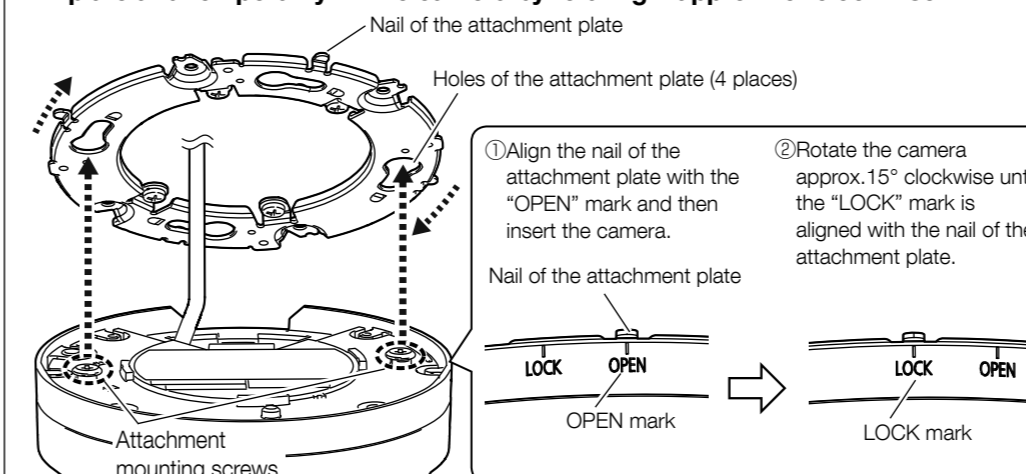


IMPORTANT:

- 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.

Step3 Mount the camera

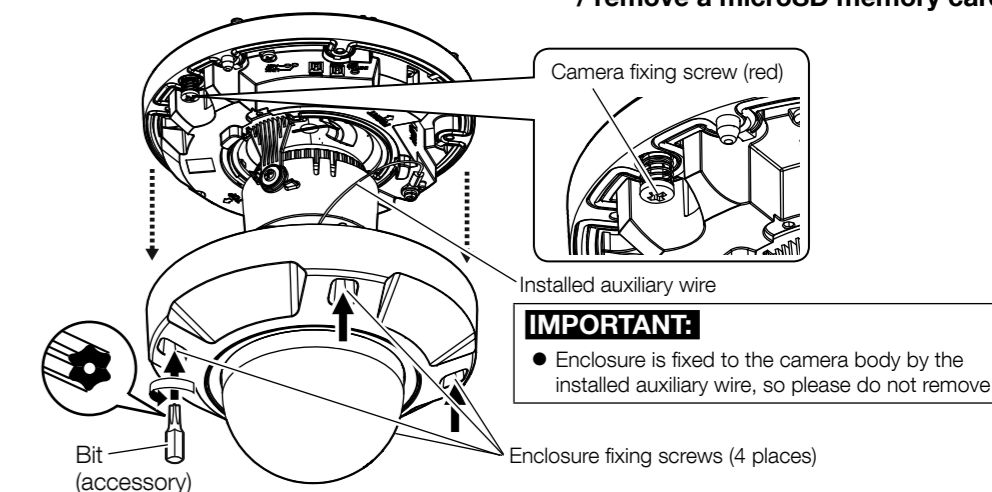
[1] Insert the attachment mounting screws (2 places) to the holes on the attachment plate and temporarily fix the camera by rotating it approx.15° clockwise.



[2] Loosen 4 enclosure fixing screws using the bit (accessory), and remove the enclosure from the camera.

[3] Secure the camera by tightening the camera fixing screw (red). Recommended tightening torque: 0.78 N·m {0.58 lbf·ft}

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



IMPORTANT:

- Enclosure is fixed to the camera body by the installed auxiliary wire, so please do not remove it.

Step1 Processing the installation surface

Common

- Attach the attachment plate (accessory) so that the marking (part number) faces toward the ceiling or wall to be installed.
- If open wiring is conducted, be sure to use conduits and run the cables inside the tubes to protect the cables from direct sunlight.

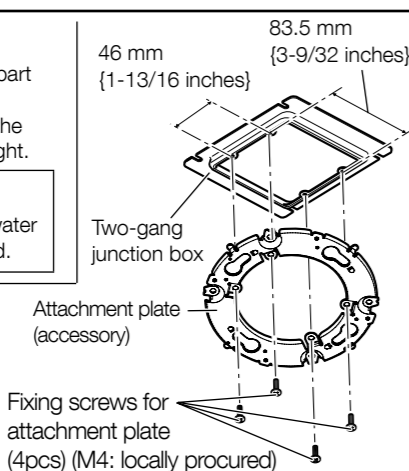
IMPORTANT:

- Installation work shall be such that there is no exposure to water into the architecture through the conduits having been joined.

Junction box

[1] Install the junction box on the installation surface.

[2] Mount the attachment plate to the junction box.



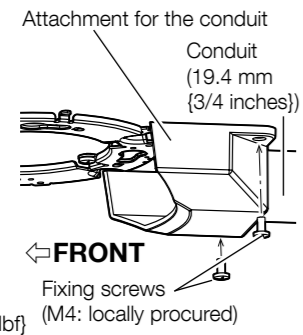
Directly mount

[1] Drill a hole in the installation surface. (4 screw holes / 1 cable access hole).

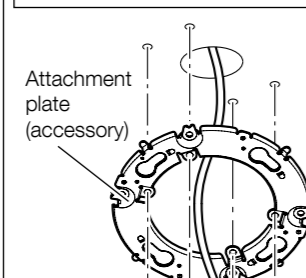
- Note:
- When installing on a wall, make a hole so as to face the "T" (TOP) mark of the template to the upper side.
 - When installing on a ceiling, make a hole so as to face the "F" (FRONT) mark of the template to the front side of the camera (in the direction of Panasonic logo).
 - When running the cable using the attachment for the conduit, it is unnecessary to make a cable access hole on the installation surface.
 - When changing the camera angle by a 90° unit afterwards, make the ø73 mm [2-7/8 inches] hole on the template (accessory) by cutting out the perforated circle on the template.

When using a conduit*

- When installing on a wall and laying a conduit in a direction other than the upper direction, use Base bracket (WV-QJB501-W or WV-Q193).
- Make two screw holes on the installation surface using the template (accessory) for fixation of the attachment for the conduit.
- Mount the attachment for the conduit with fixing screws (2 pcs.) (M4; locally procured). Minimum pull-out strength: 196 N {44 lbf}



When not using the attachment for the conduit, cut out the perforated part of the template.



[2] Install the attachment plate on the installation surface.

Base bracket

[1] Make a hole on the installation surface using template B (accessory of WV-QJB501-W or WV-Q193). (Screw holes (4 places) / Cable access hole (1 place))

No cable access hole is needed when using conduit

- Depending on the condition of the ceiling or the wall surface, six patterns of screw positions are available for fixation. Select a pattern from the following table and make holes.

	Vertical	Horizontal
A	85 mm [3-11/32 inches] (85.7 mm [3-3/8 inches])	85 mm [3-11/32 inches] (85.7 mm [3-3/8 inches])
B	138 mm [5-7/16 inches]	138 mm [5-7/16 inches]
C	83.5 mm [3-9/32 inches]	46 mm [1-13/16 inches]
D	63 mm [2-15/32 inches]	63 mm [2-15/32 inches]
E*	-	83.5 mm [3-9/32 inches]
F	70 mm [2-3/4 inches]	108.5 mm [4-9/32 inches]

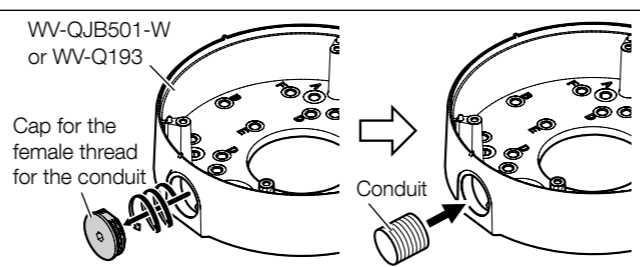
*When mounting to a single-gang junction box, make holes in the dimension of E. Fix it with screws (2 pcs.) (M4; locally procured).

- Select either of the two cable access holes to proceed with the installation work.
- After mounting the attachment plate, the mounting direction of the camera can be adjusted in 90° increments.

When using a conduit

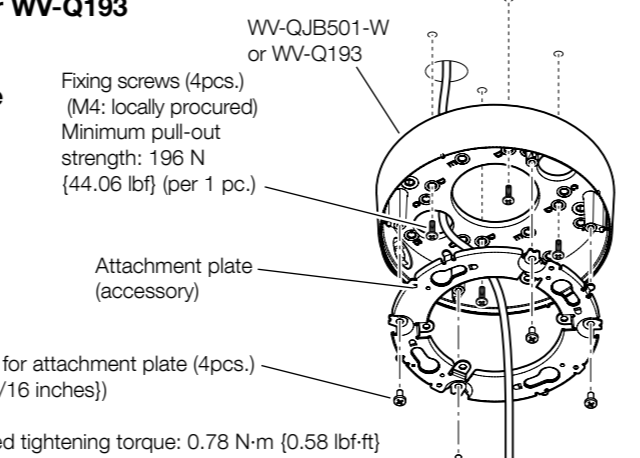
Remove the cap for the female thread for the conduit using a 5 mm hex wrench and attach the conduit.

The female thread for conduit is compliant with ANSI NPSM (parallel pipe threads) 3/4 or ISO 228-1 (parallel pipe threads) G3/4.



[2] Install the WV-QJB501-W or WV-Q193 on the installation surface.

[3] Mount the attachment plate onto the WV-QJB501-W or WV-Q193.



Step4 Adjustment

[1] Turn on the camera.

[2] Connect to the network by following information described on our support website <Control No.: 0123>.

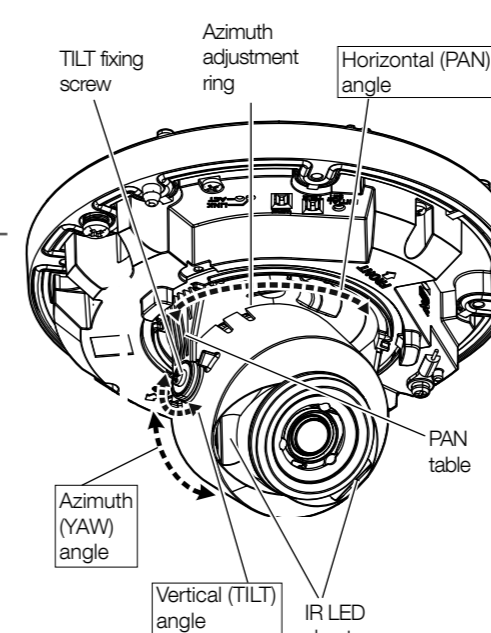
[3] Adjust the camera direction.

- Loosen the TILT fixing screw.
- 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 : -170° to +190°
Vertical (TILT) angle : -30° to +85°
Azimuth (YAW) angle : ±100°

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 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 be overlapped due to influence from the dome cover. To prevent overlapping, decrease the vertical position angle or adjust the zoom ratio.
- When adjusting the camera, do not touch IR LED sheets with your fingers.

[3] After adjusting the direction, fix the camera by tightening TILT fixing screw.
Recommended tightening torque: 0.59 N·m {0.44 lbf·ft}



[4] Adjust the zoom ratio of the camera.

Adjust the zoom ratio using the TELE button and the WIDE button while watching the screen.

Note:

- After approx. 3 seconds from releasing the TELE button or the WIDE button, the auto focus function will automatically be executed. Do not touch the camera during execution of the auto focus function.
- Attaching the enclosure may cause slight defocusing. In this case, execute the auto focus function from the setup menu after attaching the enclosure and removing the protection film.
- When the resolution is set to higher than 640x360, image quality may deteriorate depending on the zoom ratio. Refer to our support website <Control No.: C0124> for further information.

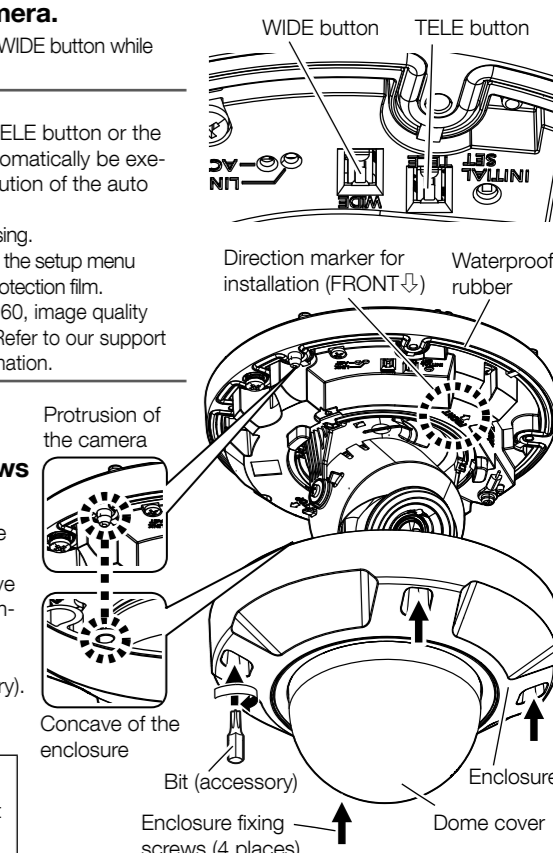
[5] Attach the enclosure and secure it by using a bit (accessory) to tighten the enclosure fixing screws (4 places).

- Align the direction of the Panasonic logo with the direction marker for installation (FRONT).
- Attach the enclosure while aligning the concave of the enclosure with the protrusion of the camera (2 places).
- Fix the enclosure by tightening the enclosure fixing screws (4 places) using the bit (accessory). Recommended tightening torque: 0.78 N·m {0.58 lbf·ft}

IMPORTANT:

- Make sure that the waterproof rubber is not detached from the groove.

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



Insert / remove a microSD memory card

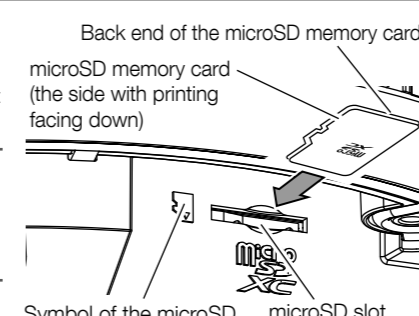
■ Insert a microSD memory card

- 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 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.

- Remove the enclosure from the camera.
- Remove 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.
- 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.