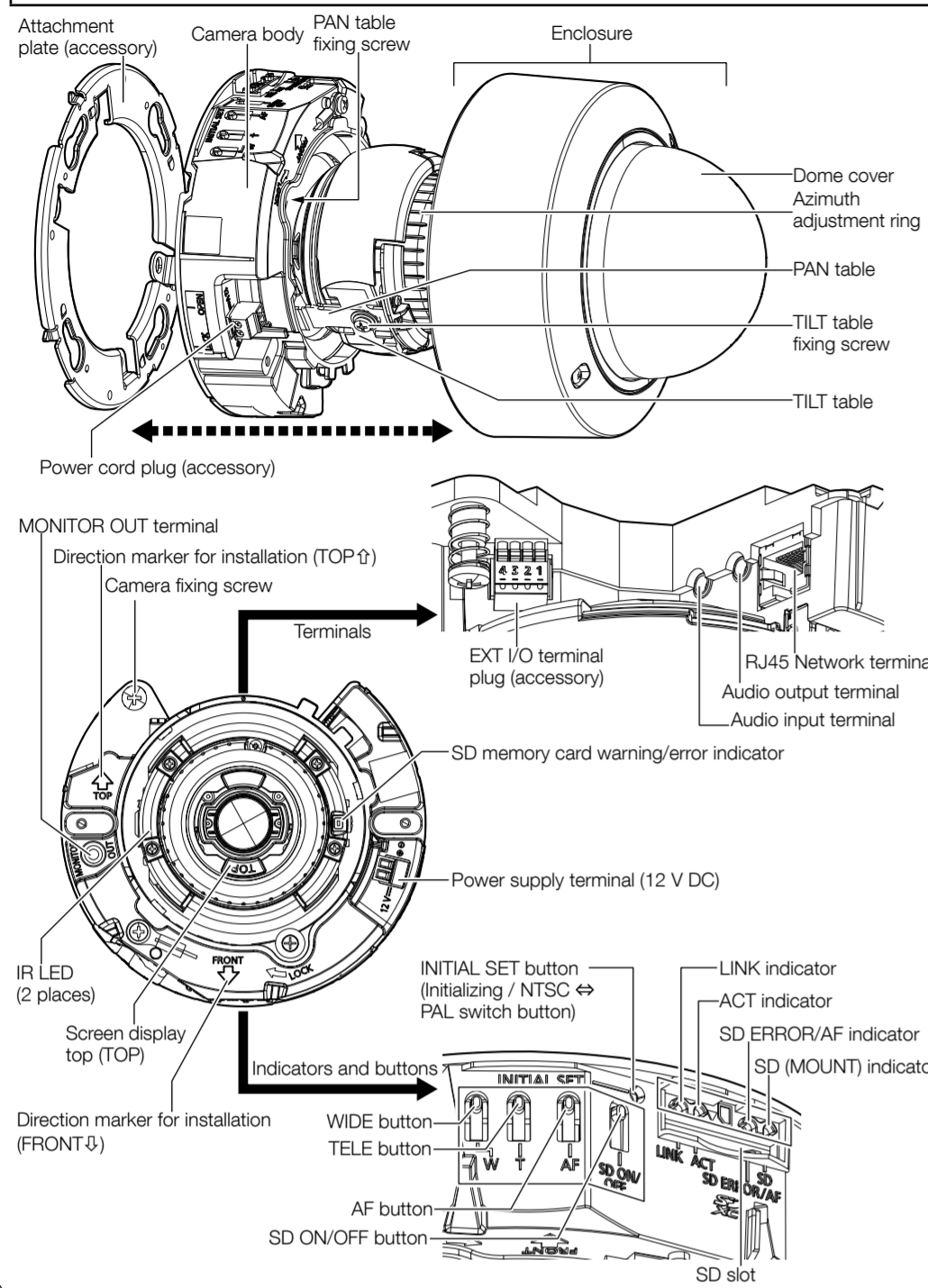


Parts and functions



■ 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 for information about settings.

Indicator	Condition	Lighting/Action
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)
SD (MOUNT) indicator	When an SD memory card is inserted and could be recognized	Lights off → Blinks green → Lights off
	When data can be saved after the SD memory card is inserted and the SD ON/OFF button is pressed (less than 1 second)	Lights off → Lights green
	When the SD memory card is removed after holding down the SD ON/OFF button (about 2 seconds)	(recording) Lights green → Blinks green → Lights off (waiting for recording) Lights green → Lights off
	When data cannot be saved to the SD memory card because an abnormality was detected or the SD memory card is configured not to be used	Lights off
SD ERROR/AF indicator	When AF (Auto Focus) operation is being executed	Blinks red (Interval of 1 time/second)
	When the network camera is being started	Lights red
	When an SD memory card is recognized normally	Lights red → Lights off
	When the SD slot is not used or an abnormality is detected in SD memory card after the camera has started	Lights red → Stays red
SD memory card warning/error indicator	When a warning status is detected (SD memory card warning detection conditions: After the total use time has exceeded 6 years and the number of overwrite times has exceeded 2000)	Lights red
	When an error status is detected (SD memory card error detection conditions: Write error, read error, etc.)	Blinks red

■ Buttons

● INITIAL SET button (Initializing / NTSC ⇄ PAL switch button)

Follow the steps below to initialize the network camera. Retry if the camera does not start up normally. When the INITIAL SET button is pressed (less than 1 second), the MONITOR OUT terminal can be switched for the NTSC monitor ⇄ PAL monitor. The monitor out is set to NTSC in the default settings of the camera.



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

● SD ON/OFF button

- When the SD ON/OFF button is pressed (less than 1 second), the SD (MOUNT) indicator lights up in green and data can be saved to the SD memory card.
- When the SD ON/OFF button is held down (about 2 seconds), the SD (MOUNT) indicator lights off and the SD memory card can be removed.

● **AF button** Press the AF button to automatically adjust the focus.

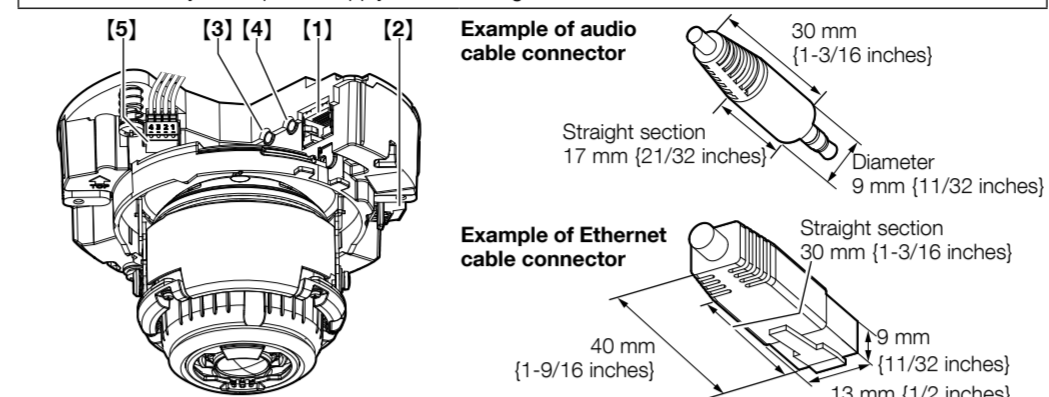
● **TELE button** Press the TELE button to adjust the zoom ratio to the "Tele" side.

● **WIDE button** Press the WIDE button to adjust the zoom ratio to the "Wide" side.

Step3 Making connections

IMPORTANT:

- Devices to which power can be supplied to this product are PoE hub, PoE power supplying equipment, and external 12 V DC power supply.
- Turn off each system's power supply before making a connection.



[1] Connect an Ethernet cable to the RJ45 network terminal.

[2] When connecting an AC adaptor or an external power supply, use the power cord plug (accessory) to connect it to the camera.

- Strip 3 mm to 7 mm (1/8 inches to 9/32 inches) from the end of the output cable of the AC adaptor. Twist the stripped part of the wire sufficiently to avoid short circuit. When connecting an external power supply to the camera, use the 16 AWG to 24 AWG singlewired or stranded wired cables.
- Loosen the screw of the power cord plug and then insert the output cable of the AC adaptor into the power cord plug.
- Tighten the screw of the power cord plug. (Recommended tightening torque: 0.34 N·m {0.25 lbf·ft})
- Attach the power cord plug to the power supply terminal (12 V DC) of the camera.

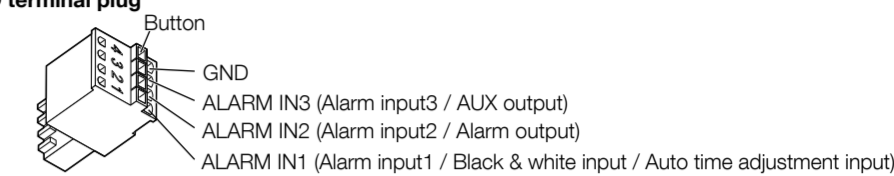
[3] If needed, connect a microphone or the line out of an external device to the audio input terminal.

[4] If needed, connect a powered speaker to the audio output terminal.

[5] If needed, connect the alarm I/O cables to the EXT I/O terminal plug (accessory).

- Remove 8 mm - 9 mm (5/16 inches - 11/32 inches) of the outer jacket of the cable and twist the cable core to prevent the short circuit first. Specification of cable (wire): 20 AWG - 26 AWG, Single core, twisted
- Push down the button of the desired terminal on the EXT I/O terminal plug with a ballpoint pen, and release the button when the cable of the external device is fully inserted into the terminal hole.
- Connect the EXT I/O terminal plug to the EXT I/O terminal of the camera.

EXT I/O terminal plug



Note:

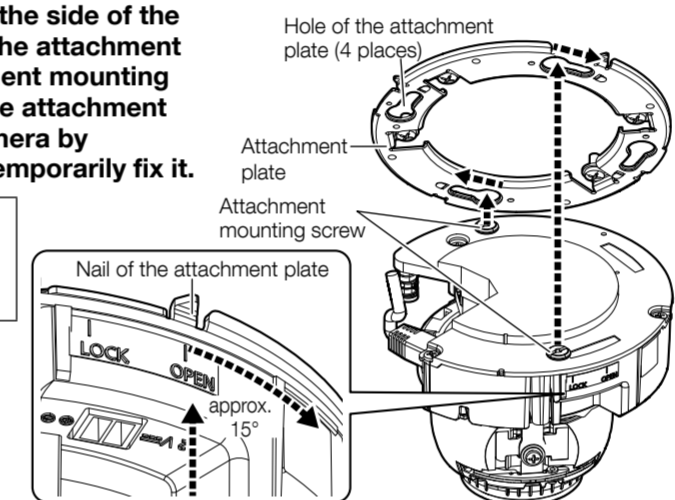
- Do not connect 2 wires or more directly to a terminal. When it is necessary to connect 2 or more wires, use a splitter.
- Check whether the stripped part of the wire is not exposed and is securely connected.
- The default of EXT I/O terminals is "Off". Refer to the Operating Instructions for further information about the EXT I/O terminal settings.

Step4 Mount the camera

[1] Align the OPEN mark of the side of the camera with the nail of the attachment plate, insert the attachment mounting screws (2 places) into the attachment plate, and rotate the camera by approximately 15° and temporarily fix it.

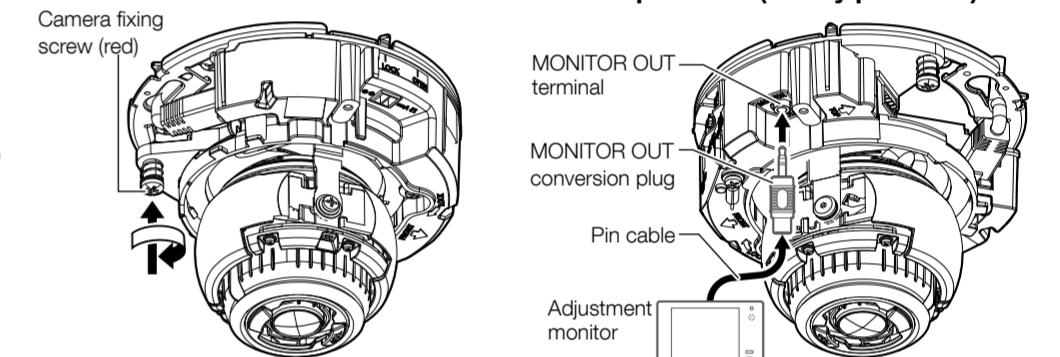
IMPORTANT:

- When mounting to a wall, mount so that the TOP mark of the camera faces up.



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

[3] Connect the MONITOR OUT conversion plug (accessory) to the MONITOR OUT terminal of the camera, and then connect the monitor for adjustment with a pin cable (locally procured).



Step1 Preparations

[1] Remove the enclosure, cushion and protection sheet from the camera.

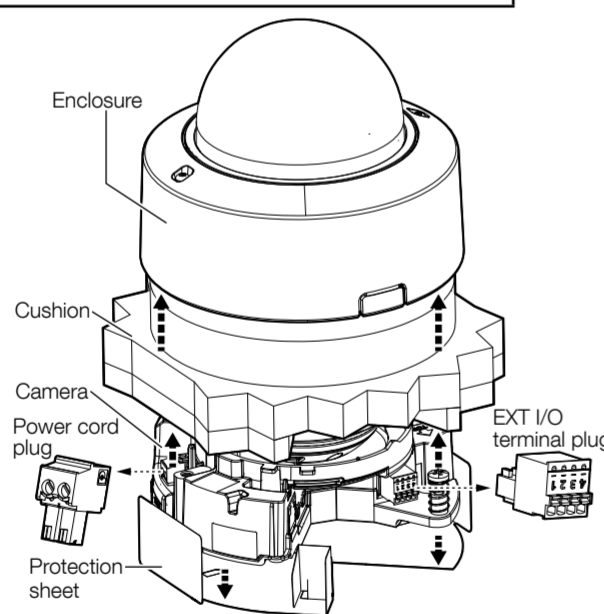
- Do not remove the auxiliary wire.

[2] If necessary, remove the power cord plug (accessory) and the EXT I/O terminal plug (accessory) attached to the camera.

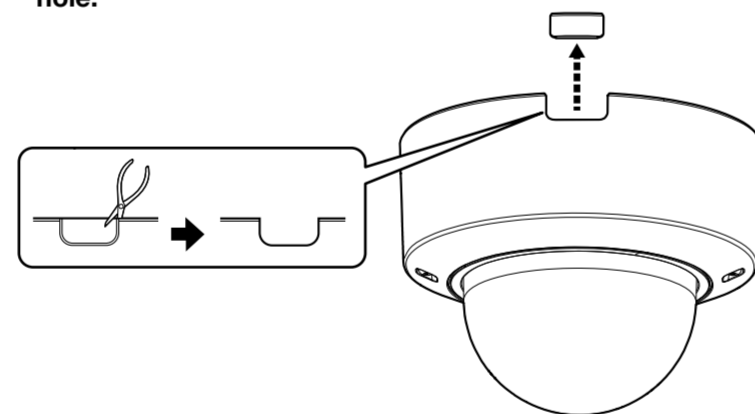
[3] If necessary, insert a SD memory card from the beginning by referring to ② and ③ of "Insert a SD memory" card in "Insert / remove a SD memory card".

Note:

- A part of the enclosure and the auxiliary wire is omitted in the following illustrations.



[4] When installing the camera directly on the ceiling or wall with cables exposed, or when mounting the camera using the ceiling mount bracket, cut out a portion of the enclosure to open a side cable access hole.



IMPORTANT:

- To prevent injuries and protect the cables, finish the side cable access hole with a file to avoid sharp edges.

Step2 Processing the installation surface (process according to the installation type)

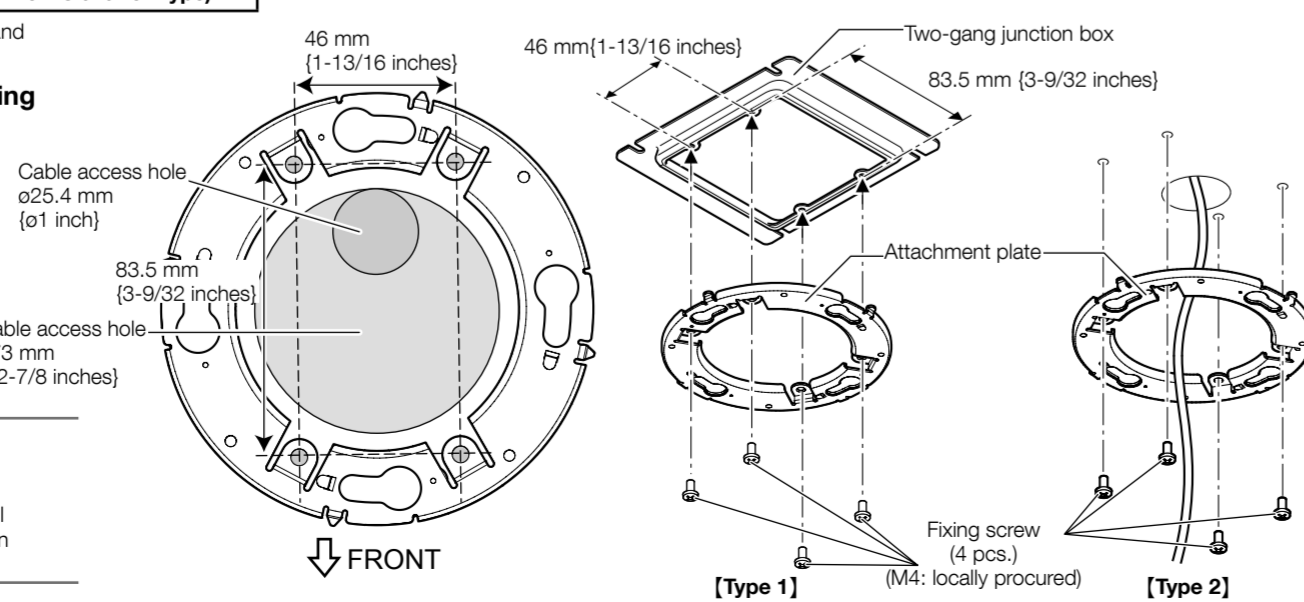
Align the FRONT direction of the template A (accessory) with the desired direction, and process the installation surface.

[Type 1] Mount the camera on the two-gang junction box using the attachment plate (accessory).

[Type 2] Directly mount the camera onto the ceiling or wall surface using the attachment plate. Minimum pull-out strength: 196 N {44 lbf} (per 1 pc.)

Note:

- Attach the attachment plate (accessory) so that the marking (part number) faces toward the ceiling or wall to be installed.
- If you want to be able to change the direction of the camera after installation, drill through a 73 mm (2-7/8 inches) diameter hole in the center. By doing so you can adjust the mounting direction of the camera in 90° increments.



Step5 Adjustment

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

[2] Adjust the camera direction.

- Loosen the PAN table fixing screw and the cross-head side of TILT table fixing screw (on one side).
- Adjust the angle of the camera while watching the adjustment monitor. Horizontal (PAN) angle: ±180° Vertical (TILT) angle: -30° - +85° Azimuth (YAW) angle: ±100°

Note:

- When mounting the camera on a wall, adjust after rotating the PAN table by 180° to the left.
- When using the camera at a vertical position where the camera lens is nearly horizontal, part of the image may appear to be overlapped, part of the camera may be visible, and reflection from IR rays may appear on the screen when viewing images at night. To prevent this, decrease the vertical position angle or adjust the zoom ratio.

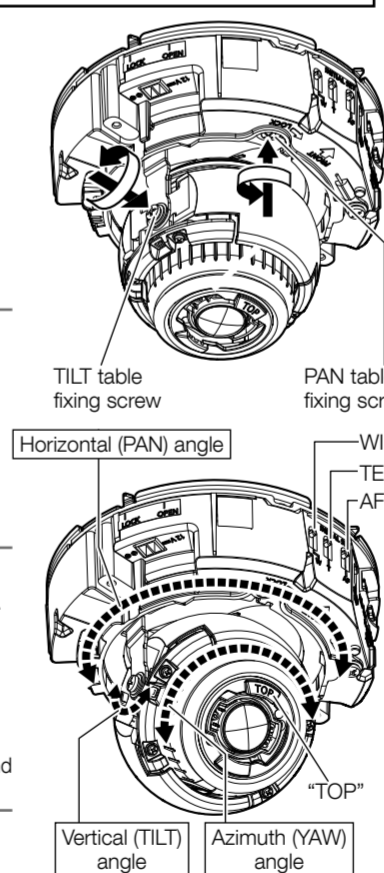
[3] Fix the camera unit by tightening the cross-head side of TILT table fixing screw (on one side) and the PAN table fixing screw. Recommended tightening torque: 0.59 N·m {0.44 lbf·ft}

[3] Adjust the zoom and focus.

- Adjust the zoom ratio using the TELE button or the WIDE button, and adjust the focus by pressing the AF (auto focus) button while watching the screen.
- Readjust the angle of the camera with the PAN table, TILT table, and azimuth adjustment ring if necessary.

Note:

- When the resolution is set to higher than 1280×720, image quality may deteriorate depending on the zoom ratio. Refer to our support website <Control No.: C0124> for further information.



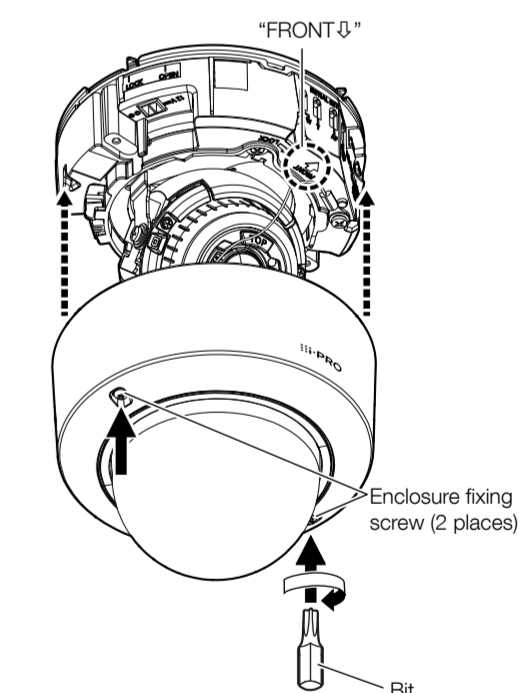
[4] Disconnect the MONITOR OUT conversion plug (accessory). Attach the enclosure and secure it by using a bit (accessory) to tighten the enclosure fixing screws (2 places).

Attach the enclosure by aligning the i-PRO logo to the direction marker (FRONT) on the camera. Recommended tightening torque: 0.59 N·m {0.44 lbf·ft}

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

[6] Download and launch the IP Setting Software and connect to the network by following information described on our support website <Control No.: C0123>.

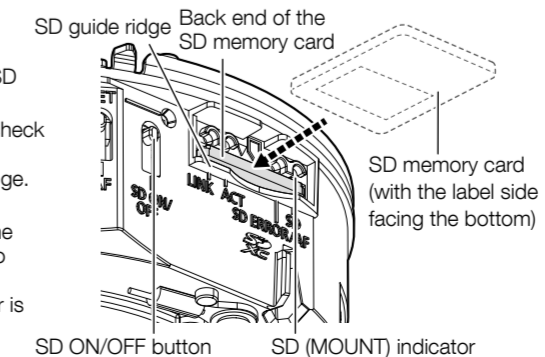
[7] Refer to the Operating Instructions and perform the auto focus function from the setup menu.



Insert / remove an SD memory card

■ Insert an SD memory card

- Remove the enclosure from the camera.
- Insert the SD memory card into the end of the SD slot and confirm that a clicking sound is made.
- Take your fingers off the SD memory card and check that its back end of SD memory card does not protrude over the upper part of the SD guide ridge.
- After the SD memory card has been inserted, press the SD ON/OFF button, and make sure the SD (MOUNT) indicator is continually lit. (If you do not press the SD ON/OFF button after inserting the SD memory card, the SD (MOUNT) indicator is automatically lit approximately 5 minutes later.)
- Attach the enclosure to its original position.



■ Remove an SD memory card

When removing an SD memory card, reverse the procedure for inserting an SD memory card. Press and hold the SD ON/OFF button for approx. 2 seconds, and then remove the SD memory card after checking that the SD (MOUNT) indicator has changed from blinking to off.

IMPORTANT:

- Before turning off the camera power switch, make sure that the SD (MOUNT) indicator is turned off.

Note:

- When using an SD memory card, format it using this product. Refer to the Operating Instructions for how to format an SD memory card.
- Use compatible SD memory cards. Refer to our support website <Control No.: C0107> for latest information about the compatible SD memory cards.