



ULTRA COMPACT COLOR CAMERA with Heavy Duty Mounting Bracket and Metal Shroud
CC4100E Installation manual

1. FEATURES

- High-performance 1/4" color CMOS sensor
- 130° (horizontal) wide-angle lens, allowing broad field of view
- Mirror-image inversion function presents optimum conditions for confirming rear view (same right-left orientation as seen through a rear-view mirror)
- Small size and weight for easy installation

2. PRECAUTIONS

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.

INFORMATION FOR USERS:

CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY AND WILL VIOLATE FCC APPROVAL.

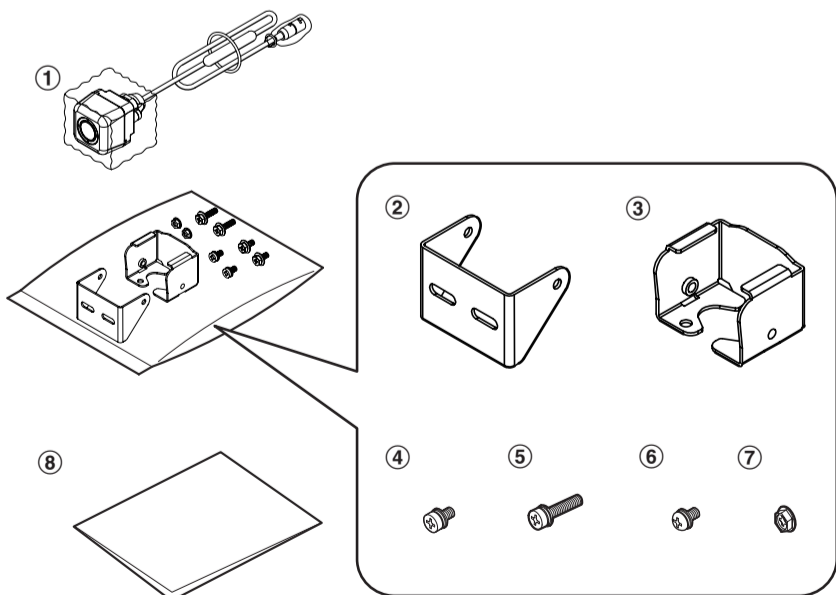
WARNING

- This device has been designed exclusively for use with a vehicular mounted rear-view television system. It should not be used for other purposes.
- Disconnect the vehicle's negative (-) terminal when installing wiring.
- Do not attempt to disassemble or modify this product.
- In the event it is necessary to drill holes in the vehicle for mounting, confirm that the drill bit or camera wiring will not strike or interfere with piping, gas tank, electrical wiring or other functional parts of the vehicle.
- Do not rely solely on the monitor image when reversing the vehicle.
 The rear-view monitor is an auxiliary device meant for confirming the presence of obstacles to the rear of the vehicle, and is limited in its range. It should be used only in conjunction with direct visual observations.
- Always reverse at low speeds.
 The rear-view monitor produces a wide-angle image, with the result that actual distances may be different than they subjectively appear in the monitor.
- Do not use when the imaging surface or other parts are malfunctioning.
- When installation and wiring are completed, confirm that the vehicle's horn, brake and warning lights, and other electrical equipment function properly as designed.

CAUTION

- Install only as directed in the Installation Manual.
- Install accessory parts as directed.
- When drilling holes in the vehicle for installation of wiring, always use insulated grommets in the holes to protect the wiring.
- If holes are drilled in the vehicle to install the camera, or when installing wiring, use silicon sealant to seal any gaps.
- Do not damage or scar the camera wiring.
- After completing the camera wiring, use cable clamps or insulation tape to bundle the wiring together.
- The images produced from the rear-view monitor are inverted right-left in the same way as images seen in the vehicle's rear-view mirrors. The image may differ depending on the vehicle type.
- Do not use high-pressure car washing devices around the camera.
 The camera is a high-precision instrument and should not be subjected to high-pressure water stream impacts.
- Periodically check the tightness of the installation screws and retighten if necessary.

3. PACKAGE CONTENTS



① Camera (with 0.5 m cable) 1	⑤ Installation screws (hex head M3 x 15) 2
② Mounting bracket 1	⑥ Installation screws (pan head M3 x 7) 2
③ Protective cover 1	⑦ Flange nuts (M3) 2
④ Installation screws (hex head M3 x 6) 2	⑧ Owner's manual & Installation manual 1

4. INSTALLATION

Before installation

- Before installing the camera or its wiring, read all safety warnings and be sure to install the unit correctly.
- Before installing the camera permanently, use adhesive tape to mount the camera in its proposed position, then check the image in the monitor to confirm proper display before fixing the camera in its final position.

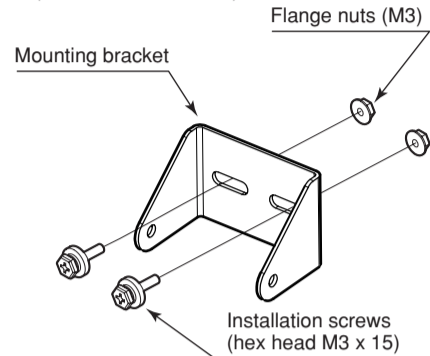
WARNING

- Disconnect the battery's negative (-) terminal installing wiring.

Installing the camera

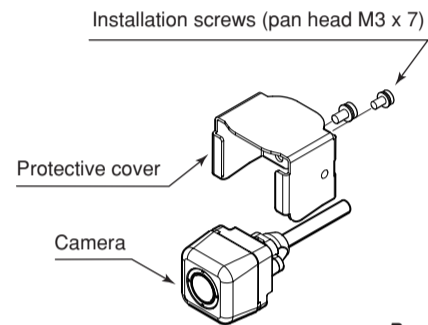
1. Attach mounting bracket to vehicle

Use two installation screws (hex head M3 x 15), attach the mounting bracket to the vehicle.



2. Attach the protective cover to the camera

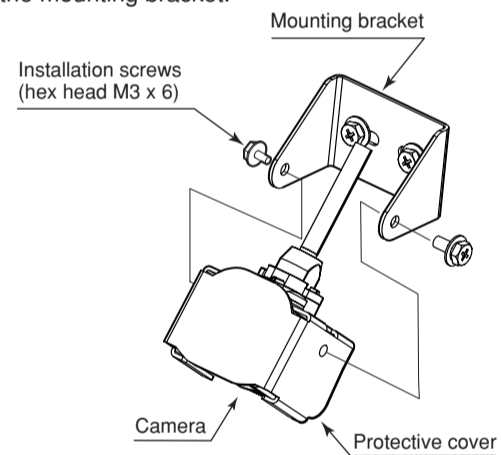
Use two installation screws (pan head M3 x 7) to attach the protective cover to the camera body.



Precaution:
 • Take care not to damage the camera body when installing the cover.

3. Attach the camera to the mounting bracket

Using two installation screws (hex head M3 x 6), attach the camera to the mounting bracket as shown. Adjust the angle of the camera as desired before tightening the screws holding the protective cover to the mounting bracket.



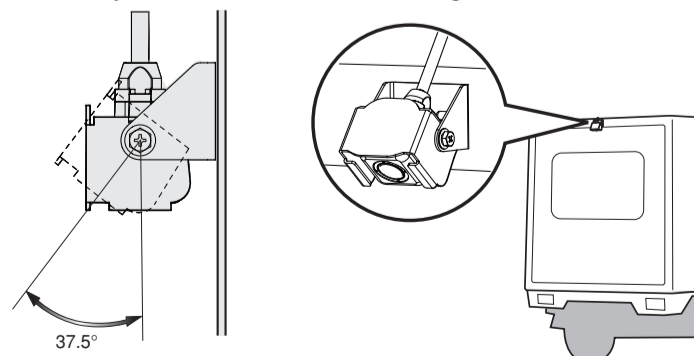
CAUTION

- When adjusting the camera position, do not allow the camera cable to be excessively stretched or loose.
- Periodically check the tightness of the installation screws and retighten if necessary.

Adjusting camera angle (example)

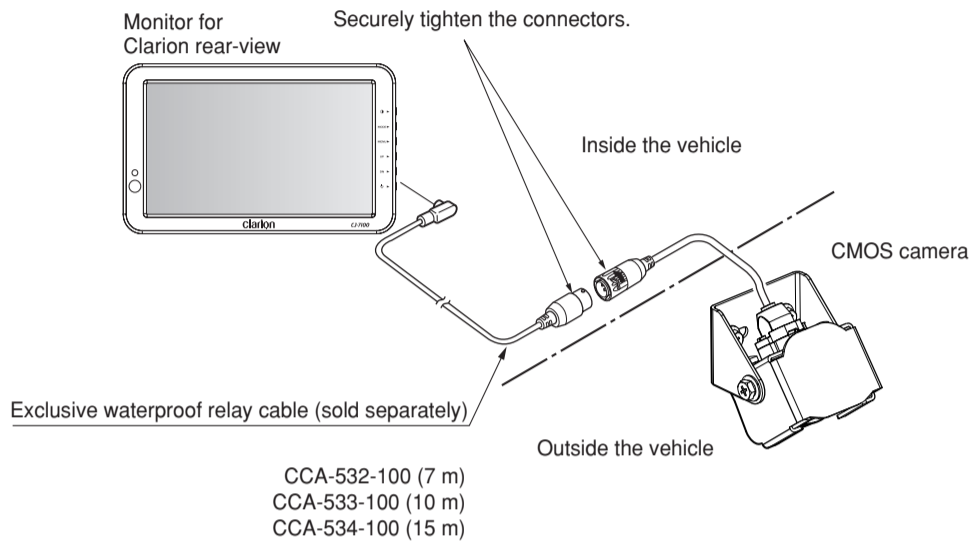
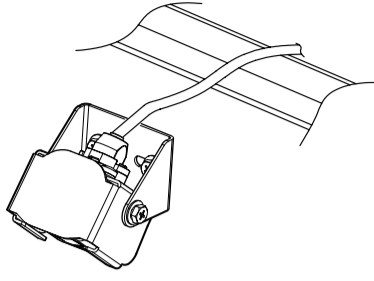
CAUTION

When the camera angle has been changed, the range displayed by the image on the monitor will change. Always confirm by direct observation when backing the vehicle.



5. WIRING

- Lead the camera cable into the vehicle and align it along the vehicle weather stripping. Fix the wires in place and prevent them from being pinched in hinges or dampers.
- Using an optional extension cable, the camera cable can be installed under the vehicle floor (carpet) to connect to a Clarion rear-view monitor.



Note:

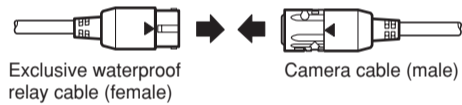
- See the Instruction Manual supplied with the monitor for information regarding wiring, operation, and composition of the monitor unit.

Use:

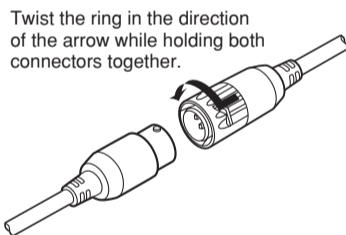
When used as part of a Clarion vehicle-mounted rear-view camera system, the rear-view image is displayed on the monitor when the vehicle's transmission is placed in reverse, or when the monitor's manual switch is used.

Waterproof Connector Fastening Procedure and Cautions

- ▲ Mark : Align the arrow marks on both connectors in order to connect the cable.

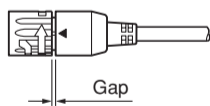


- Hold the two connectors together and twist the ring on the camera cable's connector as far as it will go.



CAUTION

Twist the yellow ring until there is no gap between the ring and the connector.
Should there be any gap between the ring and the connector, twist the ring to close it.



6. TROUBLESHOOTING

Symptom	Reason	Solution
No image	Wiring is incomplete or disconnected.	Check wiring once again and confirm correct connections.
	A fuse is burned out.	When using an independent power supply box, check the fuse and, if burned out, replace with a new one of the same capacity (1 A). If the fuse burns out repeatedly, consult your dealer or nearest Clarion Service Center.
Poor image is produced	The lens cover is soiled.	Wipe lightly with a damp soft cloth. Do not rub harshly with dry cloths since scratches may be produced.
	Sunlight or headlights from a vehicle in the rear are shining directly in the camera.	The image will return to normal when the light striking the lens is removed.
	The environment is too dark.	The image display will be poor at night or in dim light. The image will return to normal in conditions of brighter illumination.
	The level of illumination outside the vehicle changed too abruptly.	When moving from a bright to a dark location (especially from bright sunlight to shade), the image may appear excessively dark. When moving from a dark to a bright location (especially from shade into bright sunlight), the screen image may appear excessively bright.

7. SPECIFICATIONS

Power source/voltage:	DC 9 V (±0.5 V)
Power consumption:	100 mA or less
Image sensor:	1/4" color CMOS
Angle of view:	130° (horizontal) 98.8° (vertical)
Minimum subject illumination:	3 LUX or less
SN ratio:	36 dB or more
Weight:	About 80 g (bracket and 0.5 m cable)
Dimensions:	24 (W) × 24 (H) × 22 (D) mm

Note:

- Specifications and design are subject to change without notice for further improvement.



This model CC4100E is following the provisions of Directive 2004/108/EC and Directive 2004/104/EC.

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