

clarion®

Owner's manual & Installation manual
Mode d'emploi et manuel d'installation
Bedienungs- und Montageanleitung
Manuale di istruzioni e di installazione
Manual de instrucciones y manual de instalación
Gebbruiksaanwijzing & Montagehandleiding
Bruksanvisning & installationsanvisningar
Podręcznik użytkownika & przewodnik instalacji
Εγχειρίδιο Κατόχου και εγχειρίδιο Εγκατάστασης
使用说明书和安装说明书
คู่มือผู้ใช้และคู่มือการติดตั้ง
Panduan Pengguna & Panduan pemasangan

CC4001U

Vehicular Rear Vision Color Camera
Caméra couleur de recul pour véhicule
Farbheckkamera für Fahrzeuge
Telecamera a colori per la visione veicolare posteriore
Cámara en color de visión posterior para vehículos
Achteruitkijk-kleurencamera voor voertuigen
Bakåtriktad färgkamera för fordon
Kolorowa kamera cofania dla pojazdów drogowych
Έγχρωμη Κάμερα Οπίσθιας Προβολής Οχήματος
汽车后视彩色摄像头
กล้องภาพสีสำหรับมองภาพด้านหลัง
Kamera Warna Pengelihatan Belakang Kendaraan

Thank you for purchasing this **Clarion** product.

- * Please read this owner's manual in its entirety before operating this equipment.
- * After reading this manual, be sure to keep it in a handy place (e.g., glove compartment).
- * Check the contents of the enclosed warranty card and keep it carefully with this manual.

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1. FEATURES

- High-performance 1/4" color CMOS sensor
- 130° (horizontal) wide-angle lens provides extensive view to the rear
- High-resolution glass lens for high image quality
- 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
- Resists image smearing even when bright light is directed at the camera
- Uses 12 V power, for easy power connection using vehicle's reverse lamp, etc.

2. PRECAUTIONS

INFORMATION FOR USERS:

CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY.

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 communication. 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.

WARNING

- **This device has been designed exclusively for use with a vehicular mounted rear-view 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.**

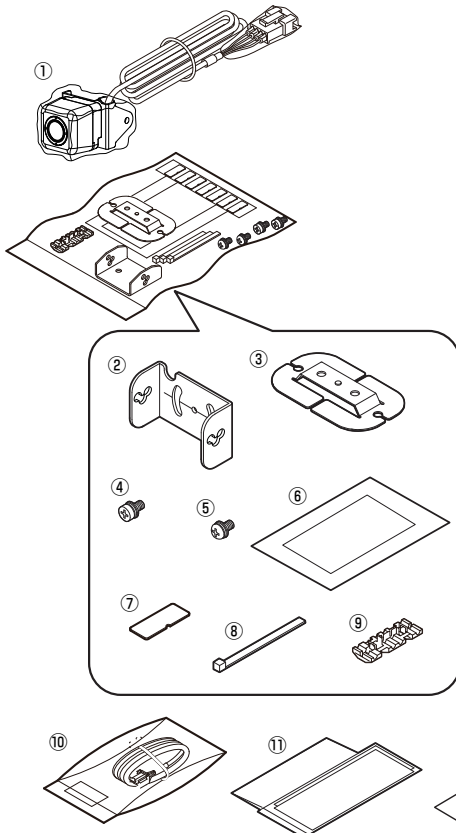
3. SPECIFICATIONS

Power source/voltage:	DC12 V (9 ~ 16 V)
Power consumption:	100 mA or less
Image sensor:	1/4" Color CMOS sensor
Angle of view:	Approx. 130° (horizontal) Approx. 98.8° (vertical)
Minimum subject illumination:	3 LUX or less
SN ratio:	36 dB or more (AGC-ON)
Weight:	Approx. 130 g (including 2.5 m cable, mounting brackets A, B)
Dimensions:	23.4 (W) x 23.4 (H) x 22 (D) mm

Note:

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

Package contents



① Camera (with 2.5 m cable)	1
② Mounting bracket A.....	1
③ Mounting bracket B.....	1
④ Installation screws (hex head M3 x 6)	2
⑤ Installation screws (pan head M3 x 6)	2
⑥ Cleaning fluid (for use in preparing surface for 2-sided tape).....	1
⑦ Cable holders	7
⑧ Cable clamps.....	3
⑨ Electro-Tap	1
⑩ Extension cable (7 m)	1
⑪ Owner's manual & Installation manual	1
⑫ Warranty Card (for North America).....	1

4. OPERATIONS

Operation when using Clarion Rear Vision camera system

The rear-view image is displayed when the transmission is placed into reverse, or when the manual switch is operated.

Troubleshooting

The following symptoms are not malfunctions. Before having the unit serviced, check the following points once more.

Symptom	Reason	Solution
No image	Wiring is incomplete or disconnected.	Check wiring once again and confirm correct connections.
	A fuse is burned out.	Check the extension cable's fuse. If the fuse has burned out, replace it with a new fuse of the same rated capacity (0.5 A). If the fuse burns out quickly again, consult your dealer, or the nearest Clarion service station.
Poor image is produced	Lens is dirty.	Wipe away dirt with a clean wet cloth. Be careful when cleaning, since strong rubbing with a dry cloth may scratch the lens.
	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 may be more difficult to see at night, or when the vehicle is in dark locations, but it will return to normal when you move to a brighter location.
	Surrounding lighting level changed suddenly.	<ul style="list-style-type: none"> When moving from a bright to a dark location (especially moving from bright sunlight to shade), the display may appear darker, but it will return to its normal brightness shortly. When moving from a dark location to a bright location (especially moving from shade to bright light after leaving the vehicle parked for a long time in bright sunlight), the display may appear excessively bright, but it will return to its normal brightness shortly.

5. 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.**

Precautions when using two-sided tape for installation

- **Do not install on glass or body surfaces treated with fluorinated resins or other water-repellent treatments.**
- **Do not install within the sweep of a rear-window wiper, or near the window washer's nozzle.**
- **Abide by the following rules in order to prevent lowering of the installation tape's adhesion:**
 - As far as possible, install on a day with clear weather.
 - Within the first 24 hours after installation, do not expose the installation to moisture (water, rain, mist, snow, etc.), or subject the installation to strong forces or impacts.
 - When installation must be performed under conditions of low ambient temperature (20°C or below), use a hair dryer to warm the surface of the bracket where the 2-sided tape is to be applied.
 - Do not touch the bracket-mounting surface's 2-sided tape, and do not attempt to move or reset the tape after initial application.

Installing/Wiring the camera

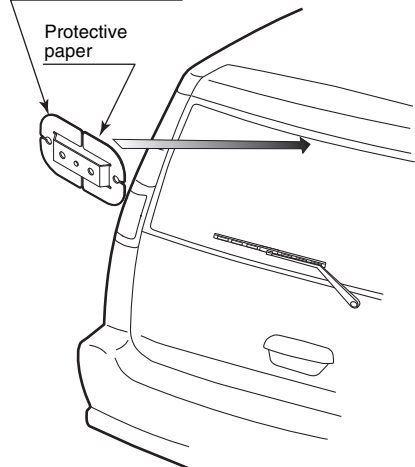
1. Installing the mounting bracket B

Use the supplied cleaner to clean the vehicle surface to which the bracket is to be applied, then remove the protective paper from the mounting surface of bracket B and press securely onto the vehicle surface.

Notes:

- Before using the supplied cleaner, read the label on the cleaner container thoroughly.
- Do not wipe the camera body with the cleaner, since it may be discolored or otherwise damaged.
- Before removing the protective paper on the bracket, place it in the proposed position on the vehicle and confirm that the surfaces match properly without gaps.
- When using screws to install the bracket, use the right-left screw holes provided on bracket B.

Mounting bracket B



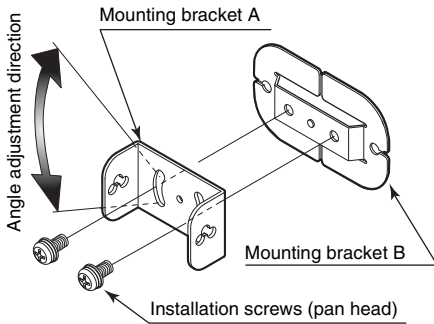
Installing/Wiring the camera

2. Installing the mounting bracket A

Using the two supplied installation screws (pan head M3 x 6), fasten bracket A to bracket B.

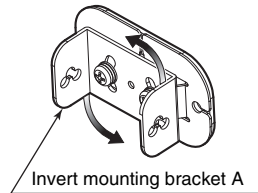
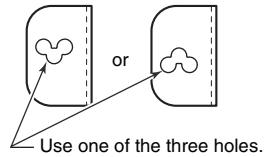
- While tightening the screws, adjust the angle of the bracket A to produce the optimum camera angle.

To mount the camera at a level angle, mount bracket A's engraved leveling line (—) even with the center of the installation screws when tightening.



⚠ 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.

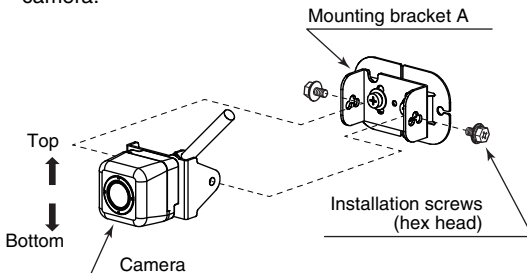


3. Installing the camera

Using the two supplied installation screws (hex head M3 x 6), attach the camera to the mounting bracket A.

- When attaching the camera to mounting bracket A, the camera position can be adjusted by using any of the three holes on the side of bracket A. The position can also be adjusted by inverting the position of bracket A.

Adjust the camera angle when mounting the camera.



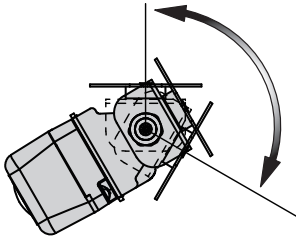
Installing/Wiring the camera

■ Adjusting camera angle (example)

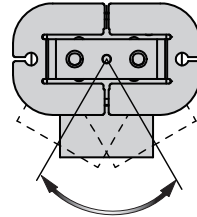
⚠ CAUTION

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.



Adjust the angle of brackets A+B as required by the mounting position.



Adjust horizontal angle while confirming image on monitor.

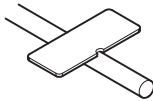
6. WIRING

Wiring

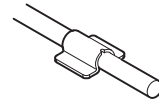
- ① Lead the camera cable into the vehicle and align it along the vehicle weather stripping. Use the supplied cable holders as necessary to fix the wires in place and prevent them from being pinched in hinges or dampers.
- ② Using an optional extension cable, the camera cable can be installed under the vehicle floor (carpet).

Applying the cable holders

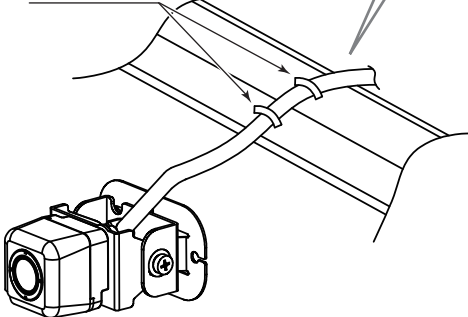
Align the gap in the cable holder with the center of the cable.



Mount the cable holder onto the vehicle body while twisting the holder onto the cable. Use the supplied cleaner to remove any dirt from the vehicle surface before installing.

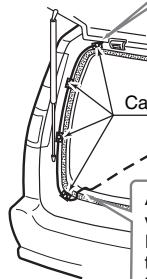


Cable holders



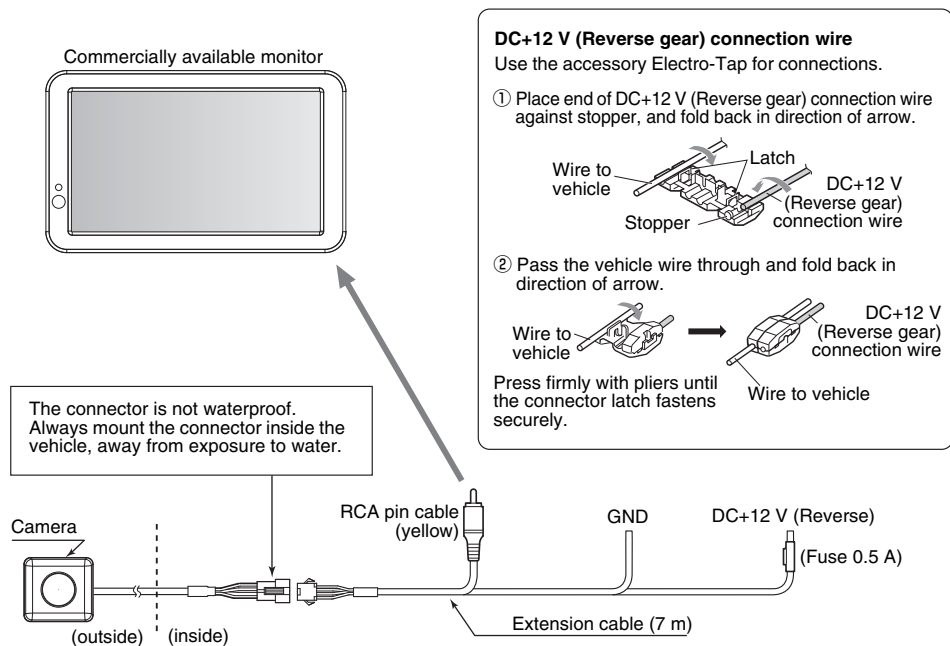
Fix the cable with adequate looseness in this area to prevent it from being stretched or pinched in the hinge when the rear gate is opened and closed.

Cable holders



Always introduce the cable into the vehicle from the bottom (floor) side. Introducing the cable from the door top or side may lead to penetration by water.

Connecting to a monitor



Note:

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



This model CC4001U (Type 1043641) is following the provisions of Directive 2004/108/EC and Directive 2004/104/EC.

Authorized Representative in Europe

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