**WARNING:**

Clarion Safety Camera & Monitor System products are intended to be utilized in conjunction with vehicle mirrors, parking assistance devices, and visual confirmation for safe vehicle operation within the line of sight, and are not intended to replace the use of mirrors, parking assistance devices, or good judgment and common sense. Users of Clarion Safety Camera & Monitor System products should at all times adhere to local driving laws and industry safety standards.

Clarion is not liable under any circumstances for the following:
- Incidental, special, or consequential damage or loss that occurs directly or indirectly to Clarion Camera & Monitor System products.
- Inconveniences, damages and/or losses (including those due to the user's improper use or incaution) caused by the inability to view the camera image due to reasons or causes that include the malfunctioning or defect of Clarion Camera & Monitor System products.

**NOTE:**

Specifications and design are subject to change without notice. Photos are non-binding. The manufacturer and importer do not take any responsibility for printing errors. Photographs in this catalog may appear slightly different in color than the actual product.
Clarion is a Leading Global Manufacturer of Commercial In-Vehicle Vision Systems

As a world leader in the development and manufacturing of in-vehicle mobile electronics, Clarion has always been at the forefront of technological evolution. Our years of experience — including more than four decades of development of in-vehicle camera systems — has given us the expertise that no one can match. And nowhere is that expertise more important than in the design of commercial vision monitoring systems. Clarion’s reliability is backed up by one of the world’s most rigorous production quality assurance systems. We know that our in-vehicle equipment must perform consistently and reliably no matter what the application. Whether it’s a garbage truck, bus, truck, forklift, agricultural, construction, or maritime machinery, we build it to exceed your expectations.

Clarion’s state-of-the-art computer design system can simulate various climatic conditions and every product goes through a wide range of quality control tests. Only when products pass these tests, are they entitled to bear the Clarion insignia and be delivered to our customers around the world. Thanks to advanced automation, Clarion’s factories produce 50,000 in-vehicle CCD and CMOS cameras for both commercial and passenger cars in countries around the world each-and-every month. When it comes to in-vehicle electronics and vision systems... think Clarion first for legendary quality you can rely on.

Built to Meet the Most Rigorous Commercial Vehicle Challenges

Water Resistance
Clarion’s dual chamber design and precision O-ring seals prevent water penetration regardless of what Mother Nature throws at it. The cameras are examined for water penetration to ensure watertight integrity.

Operational Shock Resistance
Built to last! Clarion cameras are designed to withstand up to a 10G (G-Force) shock.

Thermal Shock Resistance
Cycled from -40°C to +85°C, Clarion cameras are really put through their paces. These tests are intended to expose any problems with solder joints, the PC board, and the aluminum housing.

Repetition Durability Test
Clarion examines the durability of movable parts, such as the shutter opening/closing and monitor controls by conducting more than 50,000 operational tests.
DIGITAL WIRELESS CAMERA SYSTEMS

Clarion now offers both WLAN and FH (Frequency Hopping) wireless camera systems so you can choose the one that best fits your requirements.

Advantages of Clarion Wireless Camera Systems

1. Clarion wireless cameras share many common features, as well as individual benefits
2. Lower transmission distance than WLAN allows wider vehicle applications
3. Short video signal delay (WLAN 100msec, FH 200msec under ideal conditions)
4. Heavy duty design, built to meet rigorous commercial vehicle standards

Clarion wireless cameras are designed to fit in both Heavy Duty and Recreational Vehicles.

WLAN 2.4GHz DIGITAL WIRELESS CAMERA AND RECEIVER SYSTEM

Digitally transmitted images over WLAN provide safety and convenience while driving.

**CC3500E**

Digital WLAN Camera with Transmitter

- Reduces the installation costs of connecting cables
- Transmitter is built into the camera
- Very short signal delay: Approximately 100 milliseconds under ideal conditions
- Easy pairing operation: Just press pairing button and select the camera to be paired on monitor
- Allows for connecting with existing monitor with composite video input

**EE2178E**

Digital WLAN Receiver

- Reduces the installation costs of connecting cables
- Receiver is integrated into the 7" LCD monitor
- Transmitter is built into the camera
- Easy pairing operation
- Very short signal delay: Approximately 200 milliseconds under ideal conditions


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</tr>
</thead>
<tbody>
<tr>
<td>CC3500E/EE2178E</td>
<td>DC 12V/24V</td>
<td>Less than 300mA (DC 12V)</td>
<td>N/A</td>
<td>Less than 1.0m (Vehicle)</td>
<td>-20°C to +70°C</td>
<td>1/3.6&quot;</td>
<td>N/A</td>
<td>1.0</td>
<td>N/A</td>
<td>Camera with Transmitter</td>
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</tbody>
</table>

**EE2179E System Configuration**

**FH 2.4GHz DIGITAL WIRELESS CAMERA AND MONITOR SYSTEM**

FH camera system for maximum security and minimal signal interruption.

**EE2179E**

Digital FH Wireless Camera and Monitor System

- Reduces the installation costs of connecting cables
- Modulation system: FHSS (Frequency Hopping Spread Spectrum) technology
- Transmitter is built into the camera
- Receiver is integrated into the 7" LCD monitor
- Pre-Paired at the factory
- Short signal delay: Approximately 200 milliseconds under ideal conditions

Recommended vehicle type: Commercial trucks (up to around 10m length), Recreational vehicle, etc.

**Application Examples**

- Heavy Duty Truck
  - Mounting with Receiver
  - Monitor with Receiver
- Recreational Vehicle
  - Monitor with Receiver

**Note:**
- Supply power to the camera from the vehicle on which the camera is mounted.
- The wireless camera systems cannot be used in some countries. Contact your Clarion Dealers for details.

**Disclaimer:**
- These products are intended to improve blind spot viewing while operating the vehicle and promoting safe driving.
- When signal interruption occurs due to RF interference and/or environmental surroundings, the Clarion wireless camera systems may experience image jump and/or video signal loss. When video signal loss occurs, a caution screen or black screen is displayed to inform drivers of signal interruption.
- Mounting may not be possible depending on the condition of the vehicle.
HEAVY DUTY COLOR CCD CAMERAS

Thanks to the digital CCD image sensor, these heavy-duty cameras have exceptional picture quality.

CC2001F

Heavy Duty Color CCD Camera with Motorized Shutter
(Mirror Image/Wide Angle)

- The motorized shutter keeps dirt, water, snow, and dust off the lens when the camera is not in use (CC2001F).
- A dual chamber design provides two moisture barriers from the outside environment to the electronics inside the camera chassis.
- Weather-Resistant Die-Cast Aluminum Housing
- Electronic Iris
- Stainless steel cover and brackets included

CC2003E

Heavy Duty Color CCD Camera
(True Image/Wide Angle)

Ultra Wide Angle Compact Color CCD Camera

With a super-wide 180-degree horizontal angle of view, virtually nothing is left uncovered.

CC1601A

Ultra Wide Angle Compact Color CCD Camera
(Mirror Image/Ultra Wide Angle)

- Ultra wide 160° wide angle view reduces blind spots • IP69K compliant
- Designed to withstand severe vibrations • Electronic Iris • Stainless steel mounting bracket included

CC4100E

Ultra Compact Color CMOS Camera with HEAVY DUTY BRACKET

Offering maximum quality in minimum size together with stainless-steel bracket for unsurpassed performance and quality.

CC3000E

IR Illuminated Color CCD Camera
(Mirror Image/Wide Angle)

- Built-in 6 infrared emitters • Built-in microphone
- Built-in heating element ensures the camera is ready for use at all times
- Weather-Resistant Die-Cast Aluminum Housing • Electronic Iris
- Can also be connected to a general-purpose monitor with a composite (RCA) input terminal via the dedicated conversion cable (CCA730) (12V vehicles only)

IR ILLUMINATED COLOR CCD CAMERA

Designed to meet a wide range of conditions with built-in infrared emitters, microphone, pre-heater, and more.

**Note:** Microphone function of CC3000E/CC3000E is available only in combination with the CJ1710E, CJ7300G and CJ7500E.

**Model No.** Number of Pixels View Angle

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Number of Pixels</th>
<th>View Angle</th>
<th>Operating Temperature Range</th>
<th>Vibration Rating (G-force)</th>
<th>Weight</th>
<th>Mounting Bracket Included</th>
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<tbody>
<tr>
<td>CC1601A</td>
<td>250,000</td>
<td>180/180</td>
<td>-30°C to +70°C</td>
<td>6.8G</td>
<td>260g</td>
<td>Yes</td>
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<tr>
<td>CC3000E</td>
<td>250,000</td>
<td>180/180</td>
<td>-30°C to +70°C</td>
<td>6.8G</td>
<td>260g</td>
<td>Yes</td>
</tr>
<tr>
<td>CC3000F</td>
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<td>6.8G</td>
<td>260g</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Please refer to the full specification sheet for more details.**
**7” WATERTIGHT WIDESCREEN DIGITAL QUAD COLOR MONITOR**

Built tough to withstand the harshest working environments, Clarion's quad screen monitor now boasts waterproof capability to ensure maximum reliability under any conditions.

**CJ7500E**

7” Waterproof Widescreen Digital Quad Color Monitor  
(Compatible with both DC 12V and 24V)
- Waterproof capability: IP67
- Aluminum die-cast housing
- Digital LCD panel delivers a high-quality image
- 4 Display Modes: single, two, three or four screens
- Built-in power box allows direct connection of up to 4 cameras
- True or mirror camera image switching function
- Automatic video switching with reverse gear and turn signal inputs (When the driver uses reverse gear or left/fornt turn signals, the monitor displays the corresponding camera)
- Automatic/manual dimmer function
- On-screen display selection (Camera 1 only)
- Built-in Speaker (works in combination with the CC3000E's microphone)
- NTSC/PAL Compatible
- Built-in power box allows direct connection of up to 4 cameras  

**CJ7300G**

7” Widescreen Digital Quad Color Monitor  
(Compatible with both DC 12V/24V)
- Digital LCD panel delivers a high-quality image
- 4 Display Modes: single, two, three or four screens
- Built-in power box allows direct connection of up to 4 cameras
- LED Backlighting
- True or Mirror camera image switching function
- Automatic video switching with reverse gear and turn signal inputs
- Automatic/Manual dimmer function
- On-screen Distance Marker (Camera 1 only)
- Built-in Speaker (works in combination with the CC3000E's microphone)
- Touch-panel buttons and 8 Languages (English/French/German/Italian/Spanish/Swedish/Chinese/Japanese) display selection
- Color, Brightness, and Contrast controls
- Auxiliary (RCA) Video and Mono Audio Input
- NTSC/PAL Compatible
- On-dash mounting kit and wireless remote control included

* Only CAMERA 1 input can be used with the CC3000E’s microphone function.
LCD COLOR MONITORS

Leverage 7” digital wireless monitor deliver sharp, clear images in a sleek, stylish design that fits attractively in your vehicle’s interior.

**CJ7100E**

- 7” Wide-screen Digital Color LCD Monitor
- (Connects with kit CC1601A)
- Digital LCD panel delivers high quality picture
- Built-in camera power supply and two-camera switcher
- True/Mirror image switching function
- Automatic camera switch with reverse gear and turn signal inputs
- Manual dimmer function
- Built-in speaker
- Built-in camera power supply and two-camera switcher
- True/Mirror image switching function
- Automatic camera switch with reverse gear and turn signal inputs
- Manual dimmer function
- Color Brightness, and Contrast controls
- WVGA LCD panel that delivers high quality images
- Wireless remote control included

**CJ5600E**

- 5.6” Digital Color LCD Monitor
- CJ5600E
- Wide 5 6” screen makes it easy to confirm that everything is under control around your vehicle.

**CJ7000E**

- 7” Wide-screen Digital Color LCD Monitor (Connects with kit CC1601A)
- Digital LCD panel delivers high quality picture
- Built-in camera power supply and two-camera switcher
- True/Mirror image switching function
- Automatic camera switch with reverse gear and turn signal inputs
- Manual dimmer function
- Color Brightness, and Contrast controls
- WVGA LCD panel that delivers high quality images
- Wireless remote control included

5.6” DIGITAL COLOR LCD MONITOR

Uncompromising performance and picture quality in a compact 5.6” color digital LCD monitor.

**CJ5600E**

- Digital LCD panel that delivers high quality pictures
- Built-in camera power supply and two-camera switcher
- True/Mirror image switching function
- Automatic camera switch with reverse gear and turn signal inputs
- Manual dimmer function
- Color, Brightness, and Contrast controls
- 18 Languages (English/French/German/Italian/Spanish/Korean/Japanese) display selection
- System for Trailer Trucks

SYSTEM EXAMPLES OF REARVIEW COLOR MONITORS

- Combination with Clarion Rearview Color Monitors
- Combination with any monitor with composite A/V inputs (NTSC) using CC3000E (12V vehicle only)

4.3” DIGITAL WIRELESS COLOR LCD MONITOR

- Built-in camera power supply and two-camera switcher
- True/Mirror image switching function
- Automatic camera switch with reverse gear and turn signal inputs
- Manual dimmer function
- Color, Brightness, and Contrast controls
- 18 Languages (English/French/German/Italian/Spanish/Korean/Japanese) display selection
- System for Porsche / Audi/ BMW / Mercury

HD COLOR WIDE ANGLE MONITOR

- Combination with any monitor with composite A/V inputs (NTSC) using CC3000E (12V vehicle only)

System for trailer trucks

- Combination with Clarion Rearview Color Monitors
- Combination with any monitor with composite A/V inputs (NTSC) using CC3000E (12V vehicle only)

Wireless Digital Wireless Camera and Receiver

- WVGA Digital Wireless Camera and Receiver
- Imaging Frequency: NTSC
- Built-in camera power supply and two-camera switcher
- True/Mirror image switching function
- Automatic camera switch with reverse gear and turn signal inputs
- Manual dimmer function
- Color, Brightness, and Contrast controls
- 18 Languages (English/French/German/Italian/Spanish/Korean/Japanese) display selection

- System for trailer trucks

- Combination with any monitor with composite A/V inputs (NTSC) using CC3000E (12V vehicle only)

Accessories

- Camera Cables for CC3000E
- Universal power, audio/video, and camera cables for CC4100E
- Camera Extension Cables
- Cables & Installation Kit for Trailer
- Monitor Cables CC2001F, CC2003E, CC1601A CC4100E CC3000E
- Camera Extension Cables
- Monitor to Trailer “Break Point” Connection Cable
- Trailer “Break Point” to Camera Cables
- Extension cables (if needed)
- iPod and iPhone Video Connecting Cable
- Video Connecting Cable
- iPod and iPhone Video Connecting Cable
- Camera Cable
- Camera Cable
- iPod and iPhone Video Connecting Cable

Note: The CJ7100E and CJ5600E are not equipped with On-screen Distance Markers.