

COMTEC ZDR043

COMTEC ZDR043 Front and Rear Dash Camera System User Manual

Model: ZDR043 | Brand: COMTEC

1. INTRODUCTION

Thank you for purchasing the COMTEC ZDR043 Front and Rear Dash Camera System. This device is designed to record driving footage in Full HD, providing crucial evidence in case of an incident. It features a front camera, a rear camera, GPS functionality, a 2.7-inch LCD, and advanced safety features such as rear vehicle approach alerts and parking surveillance. This package also includes the HDROP-15 direct wiring cord for a stable power supply. Please read this manual thoroughly before installation and operation to ensure correct usage and optimal performance.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Front and Rear Full HD Recording:** Captures clear footage from both the front and rear of your vehicle with 2 million effective pixels.
- **GPS Functionality:** Records location and speed data, which can be viewed with dedicated playback software.
- **Rear Vehicle Approach Alert:** Notifies the driver when a vehicle approaches too closely from behind, helping to prevent potential road rage incidents.
- **Parking Surveillance Function:** Monitors your vehicle while parked, recording events triggered by impacts or motion (requires HDROP-15 direct wiring).
- **High-Speed Start-up:** Begins recording quickly after the vehicle starts.
- **2.7-inch LCD Display:** Allows for real-time viewing and playback of recorded footage.
- **Included 32GB microSD Card:** Provides ample storage for recorded video.
- **HDROP-15 Direct Wiring Cord:** Enables direct power connection to the vehicle's ACC and IG lines for stable operation and parking surveillance.

2.2 Components

The COMTEC ZDR043 system includes the following components:

- ZDR043 Main Unit (Front Camera)

- Rear Camera
- Rear Camera Connection Cable
- Mounting Bracket (for front camera)
- Cigarette Lighter Power Cable (standard, though HDROP-15 is included in this set)
- 32GB microSD Card
- HDROP-15 Direct Wiring Cord (approx. 4.0m)
- Instruction Manual (this document)

2.3 Product View



Image: COMTEC ZDR043 Front and Rear Dash Camera System. This image displays the main unit (front camera) with its display screen, and the compact rear camera, along with the included direct wiring harness.

3. SETUP AND INSTALLATION

Proper installation is crucial for the dash camera's performance. It is recommended to have this product installed by a professional

if you are not familiar with automotive electrical systems.

3.1 microSD Card Insertion

1. Ensure the dash camera is powered off.
2. Locate the microSD card slot on the main unit.
3. Insert the included 32GB microSD card into the slot until it clicks into place. Ensure the correct orientation.
4. To remove, gently push the card until it springs out.

3.2 Front Camera Installation

1. Choose a location on your windshield that does not obstruct the driver's view and is within the wiper's sweep area. The area behind the rearview mirror is often ideal.
2. Clean the chosen area thoroughly with an alcohol wipe and let it dry.
3. Attach the mounting bracket to the main unit.
4. Peel off the protective film from the adhesive pad on the mounting bracket.
5. Firmly press the bracket onto the windshield for at least 30 seconds.
6. Adjust the camera angle to ensure the lens captures a clear view of the road ahead, with approximately 60% road and 40% sky.

3.3 Rear Camera Installation

1. Select a position on your rear window that provides an unobstructed view and is centrally located.
2. Clean the chosen area thoroughly.
3. Attach the rear camera using its adhesive mount.
4. Route the rear camera connection cable from the rear camera to the main unit, tucking it neatly along the headliner and pillar trims.
5. Connect the cable to the designated rear camera input port on the main unit.

3.4 Power Connection (HDROP-15 Direct Wiring)

The HDROP-15 direct wiring cord (approx. 4.0m) allows for a stable power supply directly from your vehicle's fuse box, enabling parking surveillance mode. This connection typically involves ACC (Accessory) and IG (Ignition) lines.

1. **Identify Power Sources:** Locate suitable ACC (power when ignition is on) and IG (constant power) fuse locations in your vehicle's fuse box. Consult your vehicle's owner's manual or a professional for assistance.
2. **Connect Wires:** Connect the corresponding wires from the HDROP-15 to the identified power sources using appropriate fuse taps (not included).
3. **Ground Connection:** Securely connect the ground wire of the HDROP-15 to a metal part of the vehicle chassis.
4. **Connect to Dash Camera:** Plug the HDROP-15 connector into the power input port on the main unit.
5. **Test:** Start your vehicle to confirm the dash camera powers on and begins recording. Turn off the vehicle to test parking surveillance activation.

Caution: Incorrect wiring can damage your vehicle's electrical system or the dash camera. If you are unsure, seek professional installation.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

- **Power On:** The dash camera will automatically power on and begin continuous recording when the vehicle's ignition is turned on (ACC power is supplied).
- **Power Off:** The dash camera will automatically power off a few seconds after the vehicle's ignition is turned off. If parking

surveillance is enabled, it will transition to parking surveillance mode.

4.2 Recording Modes

- **Continuous Recording:** Records continuously in short segments (e.g., 1 minute files). When the microSD card is full, the oldest files are overwritten.
- **Event Recording (G-sensor):** Automatically saves and locks footage when an impact is detected by the G-sensor, preventing it from being overwritten.
- **Manual Event Recording:** Press a designated button on the unit to manually save and lock the current recording segment.

4.3 GPS Function

The built-in GPS module records your vehicle's location, speed, and time data. This information is embedded in the video files and can be viewed using the dedicated COMTEC playback software on a computer. Ensure the GPS antenna has a clear view of the sky for optimal signal reception.

4.4 Rear Vehicle Approach Alert

This function uses the rear camera to detect vehicles approaching rapidly or staying too close behind your car. When a potential threat is detected, the system will issue an audible and/or visual alert on the main unit's display. This feature is designed to increase driver awareness and help prevent dangerous situations.

- **Activation:** This feature is typically enabled by default or can be configured in the system settings.
- **Sensitivity:** The sensitivity of the detection can usually be adjusted in the settings menu to suit your driving preferences.

4.5 Parking Surveillance Function

When connected via the HDROP-15 direct wiring cord, the ZDR043 can monitor your vehicle while parked. It will automatically start recording if an impact is detected (G-sensor) or if motion is detected in the camera's field of view (motion detection). This provides security even when you are away from your vehicle.

- **Settings:** Parking surveillance settings, including sensitivity and recording duration, can be adjusted in the menu.
- **Low Voltage Cut-off:** The HDROP-15 includes a low voltage cut-off feature to prevent draining your vehicle's battery. You can typically set the voltage threshold in the dash camera's settings.

4.6 LCD Display and Menu Navigation

The 2.7-inch LCD displays live view, recorded footage, and menu options. Use the physical buttons on the unit to navigate through the menu, adjust settings, and playback videos. Refer to the on-screen prompts for specific button functions.

5. MAINTENANCE

5.1 microSD Card Management

- **Formatting:** It is recommended to format the microSD card regularly (e.g., once a month) using the dash camera's menu to maintain optimal recording performance and prevent data corruption.
- **Replacement:** microSD cards have a limited lifespan. If you experience recording errors or frequent freezing, consider replacing the card with a high-quality, dash-cam-compatible microSD card.

5.2 Cleaning

- **Lenses:** Gently wipe the front and rear camera lenses with a soft, lint-free cloth to ensure clear video quality. Avoid abrasive materials or harsh chemicals.
- **Unit Body:** Clean the main unit and rear camera body with a slightly damp cloth. Do not use excessive moisture or spray cleaners directly onto the device.

6. TROUBLESHOOTING

If you encounter issues with your COMTEC ZDR043, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device does not power on.	No power supply; loose connection; blown fuse.	Check power cable connection. Verify vehicle's fuse for the power source. Ensure ignition is on.
Recording stops or freezes.	Faulty or full microSD card; card not formatted; incompatible card.	Format the microSD card in the device. Replace the microSD card if the issue persists. Use a high-endurance card.
Poor video quality.	Dirty lens; protective film still on lens; incorrect camera angle.	Clean the camera lenses. Remove any protective film. Adjust camera angle for optimal view.
GPS not acquiring signal.	Obstructed view of sky; unit placed in a shielded area.	Ensure the main unit has a clear view of the sky. Avoid metallic tints or heated windshields that may block GPS signals.
Rear Vehicle Approach Alert not working.	Feature disabled; rear camera obstructed or dirty; sensitivity too low.	Check settings to ensure the feature is enabled. Clean the rear camera lens. Adjust sensitivity in the menu.
Parking Surveillance not activating.	HDROP-15 not correctly installed; feature disabled; low voltage cut-off triggered.	Verify HDROP-15 wiring. Ensure parking surveillance is enabled in settings. Check battery voltage or adjust low voltage cut-off setting.

If the problem persists after trying these solutions, please contact COMTEC customer support.

7. SPECIFICATIONS

Feature	Description
Brand	COMTEC
Model	ZDR043
Video Capture Resolution	1080p (Full HD)
Mounting Type	Adhesive Mount
Screen Size	2.7 inches
Display Type	LCD
Front Camera Image Sensor	1/2.7-inch CMOS Sensor
Front Camera Effective Pixels	Max 2 million pixels
Front Camera Lens Angle	Horizontal 114°, Vertical 59° (Diagonal 139°)
Front Camera F-value	2.1
Rear Camera Image Sensor	1/2.7-inch CMOS Sensor
Rear Camera Effective Pixels	Max 2 million pixels
Rear Camera Lens Angle	Horizontal 114°, Vertical 59° (Diagonal 139°)
Rear Camera F-value	2.1
Included microSD Card	32GB

Feature	Description
HDROP-15 Cord Length	Approx. 4.0m

8. WARRANTY AND SUPPORT

The COMTEC ZDR043 main unit comes with a **3-year manufacturer's warranty** from the date of purchase. The HDROP-15 direct wiring cord and other accessories typically carry a **1-year manufacturer's warranty**. Please retain your proof of purchase for warranty claims.

For technical support, troubleshooting assistance, or warranty inquiries, please contact COMTEC customer service through their official website or the contact information provided in your product packaging.

COMTEC Official Website: www.comtec.co.jp

