

## COMTEC ZDR026

# COMTEC ZDR026 Front and Rear 2-Camera Drive Recorder User Manual

Model: ZDR026 | Brand: COMTEC

## 1. PRODUCT OVERVIEW

The COMTEC ZDR026 is a high-performance drive recorder equipped with front and rear cameras, both capable of recording in WQHD (3.7 million pixels). It features advanced technologies such as SONY STARVIS CMOS sensors for clear night vision, noise countermeasures, and compatibility with LED traffic signals. This device provides comprehensive recording during driving and parking, along with various safety driving support functions.



Image: Front view of the COMTEC ZDR026 drive recorder, displaying a live road feed on its screen.

## 2. PACKAGE CONTENTS

Before installation, please verify that all components are present in the package:

- Main Unit × 1
- Rear Camera × 1
- Mounting Bracket × 1
- Double-sided Tape for Bracket × 1
- Double-sided Tape for Rear Camera × 1
- Degreasing Cleaner × 1
- 12V Cigarette Lighter Plug Cord (approx. 4m) × 1
- microSDHC Card (16GB) × 1
- Instruction Manual (with warranty) × 1

## 3. SETUP AND INSTALLATION

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### 3.1 Main Unit Installation

The main unit should be installed on the front windshield, typically behind the rearview mirror, to ensure an unobstructed view of the road. Use the provided degreasing cleaner to prepare the mounting surface before attaching the bracket with double-sided tape. The built-in G-sensor automatically detects the unit's orientation, allowing for dashboard mounting as well.



Image: The main unit of the drive recorder installed on the front windshield, providing a clear view of the road ahead.



Image: The main unit of the drive recorder installed on the car's dashboard.

### 3.2 Rear Camera Installation

Install the rear camera on the rear window to capture footage behind your vehicle. Ensure the lens has a clear view and is not obstructed by defroster lines or other objects. Connect the rear camera to the main unit using the provided cable.



Image: The rear camera of the drive recorder installed on the rear window, showing the view of traffic behind.

### 3.3 Power Connection

Connect the 12V cigarette lighter plug cord to the main unit and then to your vehicle's cigarette lighter socket. For parking surveillance functionality, an optional direct wiring cord (HDROP-14) is required.

## 4. OPERATING INSTRUCTIONS

### 4.1 Recording Modes

The ZDR026 offers three primary recording modes to ensure critical moments are captured:

- **Continuous Recording:** Records footage from the moment the engine is turned ON until it is turned OFF. When the recording limit is reached, older footage is automatically overwritten.
- **Impact Recording:** Utilizes the built-in G-sensor to detect impacts. When an impact is detected, the current file and the preceding or subsequent file are automatically saved as impact recording data. This data is protected from being overwritten by continuous recording.
- **Manual Recording:** Allows users to manually initiate recording at any desired time by pressing a dedicated switch. Similar to impact recording, the current file and adjacent files are saved as manual recording data and protected.

### 4.2 Parking Surveillance Function

To enable parking surveillance, the optional direct wiring cord (HDROP-14) must be connected. This function records both

front and rear footage when an impact is detected while the vehicle is parked. Footage is saved to a dedicated parking surveillance folder for easy identification.

- **Impact Quick Recording:** Activates only when an impact is detected, conserving power for extended surveillance.
- **One-Time Parking Surveillance Mode:** Allows temporary activation of parking surveillance even if the function is normally off, useful for specific situations away from home.
- **Parking Surveillance Mode Pass Function:** Temporarily disables parking surveillance in environments prone to false triggers, such as mechanical parking lots or windy conditions.
- **Time-Lapse Recording:** Compresses long periods of still images (1 frame per second) into short videos, enabling extended recording duration. This mode is also available during normal driving.

## 4.3 Safety Driving Support Functions

The ZDR026 includes several features to assist with safe driving:

- **Rear Vehicle Approach Notification:** Detects vehicles approaching from behind and provides an audible or alarm notification. This can also trigger an automatic event recording.
- **Forward Vehicle Start Notification:** Alerts when the vehicle in front starts moving.
- **Forward Vehicle Approach Notification:** Warns if you are approaching the vehicle in front too closely.
- **Forward Traffic Light Notification:** Detects and notifies when the traffic light ahead turns green.
- **Lane Departure Notification:** Alerts if the vehicle deviates from its driving lane.
- **Drive Support Function:** Detects and notifies sudden acceleration, deceleration, or sharp turns.
- **Vehicle Speed Alarm:** Notifies if the set vehicle speed is exceeded.

*Note: These safety driving support functions are not intended to prevent accidents. Always pay attention to actual traffic conditions and drive safely. Some functions require GPS reception to operate. Performance may vary depending on surrounding conditions, weather, the shape/color of the vehicle in front, or the mounting position of the main unit.*

## 5. ADVANCED FEATURES

- **High-Speed Recording (Engine ON):** The newly developed high-speed startup system ensures recording begins immediately after the engine is turned ON, capturing footage from the very start of your drive.
- **HDR/WDR for Clear Night Vision:** Equipped with HDR and WDR functions, the device records clear images even in scenes with high brightness differences, preventing overexposure and underexposure. (Applies to the front camera only).
- **3.7 Million Pixel Resolution:** Both front and rear cameras record in WQHD (3.7 million pixels), providing sharp and detailed footage.
- **Bright Night Shooting with Large Image Sensor:** Features a 1/2.8-inch image sensor, which is larger than conventional sensors, allowing for brighter and clearer recordings at night.
- **LED Traffic Light Compatibility:** Records reliably even with different power frequencies used by LED traffic lights in various regions (Eastern/Western Japan).
- **Noise Countermeasures:** Designed with noise suppression to prevent interference with digital terrestrial broadcasting reception or navigation GPS reception.
- **Recorded Image Inversion Function:** The built-in G-sensor automatically detects the unit's orientation and inverts the recorded image, allowing for flexible mounting options, including on the dashboard.

## 6. MAINTENANCE

### 6.1 SD Card Management

The ZDR026 utilizes a dedicated, patented file system that significantly reduces SD card fragmentation compared to standard file systems (like FAT). This means less frequent formatting is required.

- **SD Card Check Function:** Upon startup, the device checks the microSDHC card for corruption. If an issue is detected, an LED indicator will alert you, preventing missed recordings due to a faulty card.
- **File Protection Function:** The dedicated file system is designed to minimize data corruption and maximize recovery chances even if power is suddenly cut off during an accident, ensuring critical data is preserved.

*Note: While less frequent, occasional manual formatting of the microSDHC card on a computer is still recommended to maintain optimal performance. Always back up important footage before formatting.*

## 7. TROUBLESHOOTING

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### 7.1 Common Issues and Solutions

- **Device not powering on:** Check the power cable connection to the cigarette lighter socket and the device. Ensure the vehicle's ignition is on.
- **No recording:** Verify that the microSDHC card is inserted correctly and is not corrupted (check LED indicator). Ensure the recording mode is active.
- **Poor video quality:** Clean the camera lenses. Ensure the mounting position is stable and not vibrating. Check the video quality settings in the device menu.
- **GPS not receiving signal:** Ensure the device has a clear view of the sky. Avoid mounting near metallic objects or tinted windows that may block GPS signals.
- **Parking surveillance not working:** Confirm that the optional direct wiring cord (HDROP-14) is correctly installed. Check parking surveillance settings in the menu.
- **Frequent impact recordings (false positives):** Adjust the G-sensor sensitivity in the device settings. It can be adjusted in 11 levels, including OFF.

### 7.2 Emergency Recording Stop Function

In the event of a significant impact (e.g., an accident), the device automatically stops recording. This prevents important footage from being overwritten if the device is inadvertently turned on while moving the vehicle or during repairs after the incident.

## 8. SPECIFICATIONS

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Feature	Specification
Screen Size	2.7 inches
Color	Black
Power Voltage	DC12V
Max Current Consumption	Less than 400mA
Operating Temperature	-10°C to 60°C
Frame Rate	29.1 / 19.1fps (LED signal compatible)
GPS	Yes

Feature	Specification
Recording Media	microSDHC card (16GB included, supports 8GB-32GB, Class 10 recommended)
G-Sensor	Yes (0.1G to 1.0G, adjustable in 0.1G increments)
Front Camera Image Sensor	1/2.8 inch CMOS sensor
Front Camera Effective Pixels	Max 3.7 million pixels
Front Camera Lens Angle	Horizontal 113°, Vertical 60° (Diagonal 133°)
Front Camera F-Value	2.0
Rear Camera Image Sensor	1/2.8 inch CMOS sensor
Rear Camera Effective Pixels	Max 3.7 million pixels
Rear Camera Lens Angle	Horizontal 113°, Vertical 60° (Diagonal 133°)
Rear Camera F-Value	2.0
Product Dimensions	3.2 x 8.94 x 5.21 cm
Product Weight	0.11 kg
Mounting Method	Adhesive
Connectivity Technology	Wired
Video Capture Resolution	1440p

## 9. WARRANTY AND SUPPORT

### 9.1 Product Warranty

The COMTEC ZDR026 comes with a **1-year product warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. Consumable parts are excluded from this warranty. Please retain your proof of purchase for warranty claims.

### 9.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please refer to the contact information provided in the included instruction manual or visit the official COMTEC website. A dedicated viewer software for reviewing recorded data on a computer is available for download from the COMTEC homepage. This software allows you to check not only video and audio but also G-sensor information, and convert recorded data to video or still images for saving.

For further information and updates, please visit the [COMTEC Brand Store](#).

