

## COMTEC HDR963GW

# COMTEC HDR963GW Drive Recorder User Manual

Model: HDR963GW

Brand: COMTEC

## 1. INTRODUCTION

This manual provides instructions for the COMTEC HDR963GW Drive Recorder. Please read this manual thoroughly before use to ensure correct operation and to maximize the product's features. This device features front and rear Full HD recording, GPS functionality, advanced driving support, and parking surveillance capabilities.

## 2. KEY FEATURES

### 2.1. Front and Rear 2-Camera Recording

The HDR963GW records in Full HD (2 million pixels) for both front and rear views. This allows for comprehensive recording during driving and parking surveillance. Recorded images can be reviewed on the main unit's LCD screen or on a computer using dedicated software.



画像補正のHDR機能を搭載。夜間でもキレイに記録できるだけでなく、白とびや黒つぶれ、逆光にも強い為、トンネルでの明暗さなどもしっかりと補正し、キレイな映像を記録します。

Image: Diagram illustrating the 168-degree diagonal field of view for both the front and rear cameras, ensuring wide coverage.

## 2.2. Driving Support Functions

The device includes five driving support functions designed to enhance safety:

- **Forward Vehicle Start Notification:** Alerts when the vehicle in front starts moving.
- **Forward Vehicle Proximity Notification:** Warns if you are approaching the vehicle in front too closely.
- **Lane Departure Notification:** Alerts if the vehicle deviates from its lane.
- **Drive Support Function:** Detects and alerts for sudden acceleration, deceleration, or sharp turns.
- **Vehicle Speed Alarm:** Notifies if a preset speed limit is exceeded.

**Note:** These functions are aids and do not prevent accidents. Always pay attention to actual traffic conditions and drive safely. Some functions require a stable GPS signal. Performance may vary depending on surrounding conditions, weather, vehicle shape, color, and mounting position.

## 2.3. GPS Warning Function

The built-in GPS warning function supports safe driving by providing various alerts based on registered data. This data can be updated for free from the COMTEC website (data current as of December 2019).

- **Wrong-way Alerts:** Notifies when passing through areas on highways (IC/JCT, SA/PA) or urban expressways where wrong-way driving is possible.
- **Accident Points:** Alerts when approaching locations with a high incidence of past accidents.
- **Hiyari-Hatto Points:** Warns when nearing accident-prone areas, sharp curves, or steep descents on highways.
- **Speed Surveillance Routes:** Notifies when approaching automatic speed enforcement cameras nationwide.

## 2.4. Parking Surveillance Function (Optional)

By connecting the optional direct wiring cord [HDROP-14], the parking surveillance function can be activated. This feature detects impacts while parked and records video before and after the event, or provides continuous recording. The rear camera also records during parking surveillance. Recorded images are saved to a dedicated parking surveillance folder for easy review.



Image: Diagram showing the parking surveillance function detecting an impact around the vehicle, triggering recording from both front and rear cameras.

- **One-time Parking Surveillance Mode:** Allows temporary activation of parking surveillance even if it's

normally set to OFF. Useful for specific situations when away from home.

- **Parking Surveillance Mode Pass Function:** Temporarily disables parking surveillance mode when parking in locations prone to false triggers, such as mechanical parking lots, vibrating areas, or on windy days.
- **Time-lapse Recording:** Records still images at 1-second intervals, compressing them into a short video for extended surveillance periods.

**Note:** Depending on the main unit settings and microSD card capacity, images may be overwritten.

## 2.5. Normal Recording & Time-Lapse Recording

In addition to parking surveillance mode, time-lapse recording is also available during normal driving. By recording only one frame per second, extended recording times are possible. This also simplifies reviewing long periods of footage.

## 2.6. Clear Night Images with HDR/WDR

Equipped with HDR (High Dynamic Range) and WDR (Wide Dynamic Range) functions, the device records clear images even in challenging lighting conditions such as bright sunlight, dark tunnels, or strong backlighting. This prevents overexposed whites and underexposed blacks.



Image: Comparison of night recording with and without HDR function, demonstrating enhanced clarity and detail in low-light conditions.



Image: Illustrations demonstrating the HDR function's effectiveness in maintaining clear visibility when entering/exiting tunnels and when facing bright headlights.

**Note:** The rear camera supports HDR only.

## 2.7. MicroSD Card Maintenance-Free

The product's proprietary file system is designed to minimize data fragmentation on the microSD card compared to standard file systems (e.g., FAT). This allows for use without frequent formatting. However, periodic formatting is still recommended to extend the lifespan of the microSD card, as it is a consumable item.

## 2.8. Three Image Protection Functions

- **Backup Function:** In the event of a power interruption due to an accident, the built-in super capacitor prevents file corruption, protecting recorded images.
- **SD Card Check Function:** Upon startup, the device checks the microSD card. If damage is detected, an alert is displayed on the LCD, preventing missed recordings.
- **Emergency Recording Stop Function:** Automatically stops recording when a significant impact from an accident is detected. This prevents important accident footage from being overwritten if the vehicle is moved or repaired afterwards. Impact detection sensitivity is adjustable (11 levels, including OFF).

## 2.9. Function Switch

The device features a function switch that allows quick access to three modes:

- **Playback:** One-touch playback of recently recorded video.
- **Record:** Used as a manual recording switch.
- **Voice Recording:** One-touch toggle for audio recording ON/OFF.

## 2.10. Other Features

- **Compatible with National LED Traffic Lights:** Ensures clear recording of LED traffic signals across Japan, regardless of regional power frequency differences.
- **Noise Countermeasures:** Designed to minimize interference with digital terrestrial television reception and car navigation GPS signals.

## 3. SETUP

Follow these steps for proper installation of your COMTEC HDR963GW Drive Recorder:

1. **Prepare the Mounting Surface:** Clean the inside of your windshield (for the front camera) and rear window (for the rear camera) with the provided degreasing cleaner. Ensure the surfaces are dry and free of dust.
2. **Mount the Front Camera:** Attach the front camera mounting bracket to the windshield using the provided double-sided tape. Position it where it does not obstruct the driver's view and has a clear view of the road. Secure the main unit to the bracket.
3. **Mount the Rear Camera:** Attach the rear camera mounting bracket to the rear window using its double-sided tape. Ensure it has a clear view of the rear.
4. **Connect the Camera Cable:** Connect the rear camera to the front camera main unit using the provided 9m camera cable. Route the cable carefully along the vehicle's interior trim to avoid interference.
5. **Connect the Power Cable:** Plug the 12V cigarette lighter power cord into your vehicle's cigarette lighter socket and connect the other end to the main unit. Alternatively, use the optional HDROP-14 direct wiring cord for a cleaner installation and to enable parking surveillance.
6. **Insert the MicroSD Card:** Insert the provided 32GB Class 10 microSD card into the designated slot on the main unit.

7. **Initial Settings:** Once powered on, set the date, time, and adjust G-sensor sensitivity as needed through the device's menu.

**COMTEC**

# 前後2カメラ

Full HD 200万画素 & 前後 HDR機能搭載で白とびなし

## 安心の日本製

製品3年保証

**GPS搭載 高性能ドライブレコーダー** **HDR963GW**

32GB  
microSDHC付属  
録画200万画素  
Full HD

フロントカメラ  
200万画素  
対角168°  
HDR/WDR  
搭載

GPS  
搭載

リヤカメラ  
200万画素  
対角168°  
HDR搭載

**HDR/WDRで夜間も綺麗**

駐車監視機能搭載

New 安全運転支援機能

GPS警報機能搭載

**安心の日本製** **製品3年保証** **補償サービス2万円** **GPS搭載** **2.7インチ液晶** **ノイズ対策済** **HDR WDR搭載** **LED信号機対応** **駐車監視(エアコン)** **録画200万画素** **視野角(対角)168°** **常時録画** **衝撃録画** **マニュアル録画** **音声録音** **再生本体** **テレビ**

Image: The COMTEC HDR963GW Drive Recorder, showing the main unit (front camera) and the separate rear camera.



画像補正のHDR機能を搭載。夜間でもキレイに記録できるだけでなく、白とびや黒つぶれ、逆光にも強い為、トンネルでの明暗さなどもしっかりと補正し、キレイな映像を記録します。(フロントカメラのみ)

Image: The front camera of the COMTEC HDR963GW Drive Recorder installed on the interior of a car's windshield.



2つのカメラにより前方と後方を前後同時録画。  
録画した映像は本体の液晶画面、パソコンで確認することができます。

Image: The rear camera of the COMTEC HDR963GW Drive Recorder installed on the interior of a car's rear window.

## 4. OPERATING INSTRUCTIONS

### 4.1. Basic Recording

The device automatically starts recording when the vehicle ignition is turned on and stops when the ignition is turned off. Continuous loop recording overwrites the oldest files when the microSD card is full.

### 4.2. Manual Recording

Press the 'Record' button on the function switch to initiate a manual recording. This recording will be saved as an event file and protected from being overwritten by normal loop recording.

### 4.3. Event Recording

When the G-sensor detects an impact (e.g., sudden braking, collision), the device automatically saves the footage before and after the event as a protected file. The sensitivity of the G-sensor can be adjusted in the settings menu.

## 4.4. Parking Surveillance (with optional HDROP-14)

If the optional HDROP-14 direct wiring cord is installed, parking surveillance activates automatically when the engine is turned off. You can configure settings such as impact detection sensitivity, continuous recording duration, and time-lapse recording in the menu.

- **Activating/Deactivating:** Parking surveillance can be enabled or disabled via the system settings.
- **One-time Mode:** Temporarily activate parking surveillance by pressing the function switch even if it's normally off.
- **Pass Function:** Temporarily disable parking surveillance for specific parking situations (e.g., mechanical parking lots) through the menu.

## 4.5. Playback

You can play back recorded videos directly on the device's LCD screen. For more detailed analysis, transfer the microSD card to a computer and use the dedicated COMTEC viewer software.

## 4.6. Voice Recording

Toggle audio recording ON or OFF by pressing the 'Voice Recording' button on the function switch. The current status will be indicated on the screen.

## 4.7. Menu Navigation

Access the device's settings menu by pressing the menu button. Use the navigation buttons to scroll through options and the select button to confirm changes. Refer to the on-screen prompts for specific adjustments.

# 5. MAINTENANCE

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## 5.1. MicroSD Card

Although the HDR963GW features a maintenance-free file system, periodic formatting of the microSD card is recommended to ensure optimal performance and extend its lifespan. MicroSD cards are consumable items and should be replaced periodically.

## 5.2. Cleaning

Gently clean the camera lenses and the main unit's screen with a soft, dry cloth. Avoid using abrasive cleaners or solvents that could damage the surfaces.

## 5.3. Firmware Updates

Check the official COMTEC website regularly for any available firmware updates. Keeping your device's firmware up-to-date ensures the best performance and access to new features.

## 5.4. GPS Data Updates

GPS warning data can be updated for free from the COMTEC website. Ensure your device has the latest data for accurate alerts.

## 6. TROUBLESHOOTING

If you encounter issues with your HDR963GW, refer to the following common problems and solutions:

Problem	Possible Cause / Solution
Device does not power on.	Check if the power cable is securely connected to both the device and the vehicle's power source. Ensure the vehicle's ignition is on.
No recording is taking place.	Verify that a microSD card is inserted correctly. Check if the card is full or damaged (the SD Card Check Function will alert you). Format the microSD card if necessary.
Poor image quality.	Clean the camera lenses. Ensure the HDR/WDR functions are enabled in settings, especially for night driving or high-contrast environments.
GPS not working or inaccurate.	Ensure the device has a clear view of the sky. Avoid mounting near metallic objects that could block the signal. Check GPS signal status on the device.
Driving support alerts are too frequent or not occurring.	Adjust the sensitivity settings for each driving support function in the menu. Ensure the camera lens is clean and unobstructed.
Parking surveillance is not working.	Confirm that the optional HDROP-14 direct wiring cord is correctly installed. Ensure parking surveillance mode is activated in the settings. Check the 'Parking Surveillance Mode Pass Function' if it's temporarily disabled.

## 7. SPECIFICATIONS

Feature	Description
Manufacturer	COMTEC
Model Number	HDR963GW
Product Dimensions (D x W x H)	27 x 90 x 56 mm
Product Weight	560 g
Color	Black
Video Capture Resolution	1080p (Full HD)
Front Camera Sensor	1/2.7 inch CMOS, Max 2 million pixels
Front Camera Lens Angle	Horizontal 136°, Vertical 70° (Diagonal 168°)
Front Camera F-value	2.0
Rear Camera Sensor	1/2.7 inch CMOS, Max 2 million pixels
Rear Camera Lens Angle	Horizontal 136°, Vertical 70° (Diagonal 168°)
Rear Camera F-value	2.0
Special Features	Built-in GPS, HDR/WDR (Front), HDR (Rear), MicroSD Card Maintenance-Free File System, Function Switch

Feature	Description
Connectivity Technology	Wired
Mounting Type	Adhesive
Control Method	Touch
Included Components	Front camera x1, Rear camera x1, Camera cable (approx. 9m) x1, Front camera mounting bracket x1, Front camera mounting bracket double-sided tape x1, Rear camera mounting bracket double-sided tape x1, Degreasing cleaner x1, 12V Cigarette lighter plug cord (approx. 4m/1A fuse built-in) x1, Sticker [HDROP-06] x1, Hex wrench (for bracket angle adjustment) x1, Cord clamp x3, microSD card (32GB/class10) x1, SD card conversion adapter x1, Instruction manual (with warranty) x1

## 8. WARRANTY AND SUPPORT

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### 8.1. Product Warranty

The COMTEC HDR963GW Drive Recorder comes with a **3-year warranty** from the date of purchase. Please note that accessories such as mounting brackets, cigarette lighter plug cords, built-in batteries, and microSD cards are considered consumables and are not covered under this warranty. Proof of purchase date is required for warranty claims. The warranty is void if the product is used outside of Japan.

### 8.2. Data Recovery Service

A free data recovery service is included for **1 year** from the date of purchase. This service aims to repair unreadable recorded data from a damaged main unit or SD card so that it can be played back. Please note that overwritten recorded data or data from an SD card that has reached its end-of-life cannot be recovered. For detailed information, please refer to the COMTEC homepage.

### 8.3. Accident Compensation Service

This product includes an accident compensation service. Upon registration, COMTEC will pay a uniform amount of **20,000 JPY** for 1 year in the event of an accident. Registration is required within one month of purchase. This service is valid for one year from registration and can be renewed annually for a fee (up to a maximum of 3 years). However, if compensation has been received once, renewal is not possible. For detailed information, please refer to the COMTEC homepage.

### 8.4. Support and Downloads

For detailed product information, firmware updates, GPS data updates, and to download the dedicated viewer software, please visit the official COMTEC homepage. The viewer software allows you to check recorded video, audio, and G-sensor information on your computer, and convert data to video or still images.

**COMTEC Official Website:** [www.comtec.co.jp](http://www.comtec.co.jp)