

## Navitel MR250NV

# Navitel MR250NV Dual Car Camera Rearview Mirror User Manual

Model: MR250NV

## 1. INTRODUCTION

The Navitel MR250NV is a 5-inch smart rearview mirror that integrates essential functions for safe driving. This device features a built-in DVR for recording events in front of the vehicle and includes an additional rear camera. The mirror is housed in a durable metal casing. The rear camera is dust and water-resistant, meeting IP65 standards. The MR250NV records in Full HD at 30 frames per second using MOV video compression. A sensitive microphone ensures high-quality sound capture.

Equipped with an integrated G-sensor, the device automatically protects critical footage before and after an accident, triggered by sudden acceleration, braking, or collision. When connected to power, the dash cam automatically begins recording upon engine start. It also includes a motion detector, allowing it to record video even when the vehicle is parked and unattended. The 5-inch IPS screen supports microSD cards up to 64 GB. Night vision functionality ensures clear image content during twilight and night driving conditions.

## 2. SAFETY INFORMATION

### 2.1 General Safety Precautions

- Ensure the device is securely mounted and does not obstruct the driver's view or interfere with vehicle controls.
- Do not operate the device or adjust settings while driving. Perform all adjustments when the vehicle is safely parked.
- Use only the original power adapter and cables provided with the device to prevent damage and ensure proper operation.
- Avoid exposing the device to extreme temperatures, direct sunlight for prolonged periods, or excessive moisture.
- Keep the lens clean to ensure clear recordings. Use the provided microfiber cloth for cleaning.
- Do not attempt to disassemble or repair the device yourself. Contact customer support for assistance.

### 2.2 Battery Safety

- The device contains a built-in Lithium-polymer battery. Do not expose it to high temperatures or dispose of it in fire.
- If the battery appears damaged or swollen, discontinue use immediately and contact support.

- Dispose of batteries according to local regulations.

### 3. PACKAGE CONTENTS

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Verify that all items are present in the box:

- Navitel MR250NV Rearview Mirror DVR
- 12/24 V Car Charger
- Mini USB to USB Cable
- Rear Camera
- Video Cable for Rear Camera
- Microfiber Cloth
- User Manual
- Voucher for Navitel Navigator application (12 months free navigation)

### 4. PRODUCT OVERVIEW

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Familiarize yourself with the main components of your Navitel MR250NV device.

#### 4.1 Front View of Mirror DVR



Image: Front view of the Navitel MR250NV rearview mirror, showing the integrated display with split-screen camera views and control buttons (POWER, UP, OK/D, DOWN, MENU) at the bottom.

- **Display Screen:** 5-inch IPS screen for viewing recordings and settings.
- **Front Camera Lens:** Integrated on the mirror for forward-facing recording.
- **Control Buttons:** POWER, UP, OK/D (OK/Delete), DOWN, MENU for navigation and settings.

#### 4.2 Rear View and Ports



Image: Rear view of the Navitel MR250NV rearview mirror, highlighting the mounting clips, the front camera lens, and the AV-IN, USB, and RESET ports on the top edge.

- **Mounting Clips:** For securing the mirror over the existing rearview mirror.
- **AV-IN Port:** For connecting the rear camera.
- **USB Port:** For power supply and data transfer.
- **RESET Button:** To restart the device if necessary.
- **MicroSD Card Slot:** (Typically on the side, not visible in this image but implied) For memory card insertion.

### 4.3 Rear Camera



Image: A small, black, cylindrical rear camera unit with a mounting bracket, typically connected via a cable to the main mirror unit.

- **Rear Camera Unit:** Compact, metal-cased camera for rear-view recording.
- **Mounting Bracket:** For flexible installation on the rear window or near the license plate.

## 5. SETUP

### 5.1 Installing the MicroSD Card

1. Ensure the device is powered off.
2. Locate the microSD card slot on the side of the mirror unit.
3. Insert a microSD card (up to 64 GB, Class 10 or higher recommended) into the slot until it clicks into place.
4. To remove, gently push the card until it springs out.

*Note: Format the microSD card regularly within the device settings to ensure optimal performance and prevent recording errors.*

## 5.2 Mounting the Rearview Mirror DVR

1. Attach the Navitel MR250NV to your vehicle's existing rearview mirror using the provided mounting straps/clips. Ensure it is securely fastened and does not vibrate.
2. Adjust the angle of the front camera lens to capture the road ahead clearly.

## 5.3 Installing the Rear Camera

The rear camera offers flexible installation options:

- **Inside the Vehicle:** Mount on the rear window using the adhesive sticker.
  - **Outside the Vehicle:** Mount near the license plate using the metal bracket. Ensure the camera is protected from direct impact.
1. Choose a suitable mounting location for the rear camera.
  2. Secure the camera using the appropriate method (adhesive or screws with bracket).
  3. Route the video cable from the rear camera to the main mirror unit, connecting it to the AV-IN port. Ensure the cable is tucked away safely and does not interfere with vehicle operation.

## 5.4 Connecting Power



Image: The Navitel 12/24V car charger connected to a mini USB cable, used to power the device.

1. Connect the mini USB end of the power cable to the USB port on the mirror unit.
2. Plug the car charger into your vehicle's 12V/24V power outlet (cigarette lighter socket).
3. The device will automatically power on and begin recording when the vehicle's engine starts.

## 6. OPERATING INSTRUCTIONS

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### 6.1 Basic Recording

- **Automatic Start:** The device automatically powers on and begins recording when connected to power and the vehicle engine starts.
- **Manual Start/Stop:** Press the POWER button briefly to manually start or stop recording.
- **Loop Recording:** Recordings are saved in segments (e.g., 1, 3, or 5 minutes). When the microSD card is full, the oldest unlocked files are overwritten.

### 6.2 G-Sensor (Impact Detection)

The built-in G-sensor detects sudden acceleration, braking, or collisions. When an impact is detected, the current recording segment is automatically locked to prevent it from being overwritten by loop recording.

- Adjust G-sensor sensitivity in the settings menu if recordings are being locked too frequently or not frequently enough.

### 6.3 Parking Monitoring

When parking monitoring is enabled, the device will automatically start recording if it detects a shock or motion while the vehicle is parked and the engine is off. This feature requires a continuous power supply (e.g., hardwire kit, not included) or sufficient internal battery charge.

### 6.4 Night Vision

The front camera's SC2363 sensor and 4-layer glass lens, combined with the rear camera's capabilities, enhance video clarity in low-light conditions, ensuring better visibility during twilight and night driving.

### 6.5 Using the Display and Controls

- **Touch Screen:** The 5-inch IPS screen is touch-sensitive for intuitive menu navigation and playback.
- **MENU Button:** Press to access the main settings menu.
- **UP/DOWN Buttons:** Navigate through menu options.
- **OK/D Button:** Confirm selections or delete files (when in playback/gallery mode).
- **Switching Camera Views:** Tap the screen or use a dedicated button (if available, refer to on-screen icons) to switch between front camera, rear camera, or split-screen views.

### 6.6 Playback and File Management

1. Stop recording (if active).
2. Enter the playback/gallery mode via the MENU button.
3. Use UP/DOWN to browse through recorded videos and photos.
4. Press OK to play a selected video.
5. To delete a file, select it and press the OK/D button (confirm deletion if prompted).
6. Locked files (from G-sensor events) are stored in a separate folder and cannot be overwritten by loop recording.

## 7. MAINTENANCE

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### 7.1 Cleaning the Device

- Use the provided microfiber cloth to gently wipe the mirror screen and camera lenses.
- Do not use abrasive cleaners or solvents, as they may damage the surfaces.
- Ensure the device is powered off before cleaning.





Image: A Navitel branded microfiber cloth, ideal for cleaning the device's screen and lenses.

## 7.2 MicroSD Card Management

- Regularly format the microSD card (e.g., once a month) through the device's settings menu. This helps maintain card health and prevents data corruption.
- Back up important recordings to a computer before formatting.
- Replace the microSD card if you experience frequent recording errors or data loss.

## 8. TROUBLESHOOTING

### 8.1 Common Issues and Solutions

Problem	Possible Cause	Solution
Device does not power on.	No power supply; faulty cable/charger; discharged battery.	Check power connection; ensure car charger is working; charge device for at least 30 minutes.
Recording stops unexpectedly.	MicroSD card full; card error; low power.	Format microSD card; replace card; ensure continuous power.
Poor video quality.	Dirty lens; protective film still on; low light conditions.	Clean lenses; remove protective film; ensure adequate lighting (night vision is automatic).
Rear camera not displaying.	Loose cable connection; faulty camera/cable.	Check AV-IN cable connection; try restarting the device.
Device freezes or becomes unresponsive.	Software glitch.	Press the RESET button using a thin object (e.g., paperclip).

## 9. SPECIFICATIONS

Feature	Detail
Model Number	MR250NV
Processor	MStar MSC8328
Display Size	5 inches
Display Resolution	854 x 480 pixels
Front Camera Sensor	SC2363 (Night Vision)
Front Camera Lens	4-layer glass
Front Camera Viewing Angle	160 degrees
Front Camera Video Resolution	1920 x 1080 Full HD
Front Camera Frame Rate	30 fps
Front Camera Image Resolution	2048 x 1536 pixels
Rear Camera Viewing Angle	85 degrees

Feature	Detail
Rear Camera Video Resolution	656 x 492 pixels
Rear Camera Frame Rate	30 fps
Rear Camera Image Resolution	1962 x 1482 pixels
Video Format	MOV
Image Format	JPG
Storage Support	MicroSD card up to 64 GB
Special Features	G-sensor, Night Vision, Parking Monitoring, Loop Recording, Sound Recording
Connectivity	USB
Battery Type	Lithium-polymer (included)
Weight	258 Grams
Rear Camera Protection	IP65 Dust and Water Resistant

## 10. WARRANTY AND SUPPORT

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### 10.1 Warranty Information

Please refer to the warranty card included with your product or visit the official Navitel website for detailed warranty terms and conditions. The product title mentions "12 Months" which refers to the included navigation app voucher, not the product warranty itself.

### 10.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or inquiries regarding your Navitel MR250NV, please contact Navitel customer support.

- **Online Support:** Visit the official Navitel website for FAQs, software updates, and contact information.
- **Email/Phone:** Refer to the contact details provided in your product packaging or on the official website.

