NANO CAM PLUS®

USER MANUAL

FULL HD DUAL DASH CAM DVR
WITH REVERSE CAMERA & REVERSE MONITOR

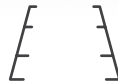
FULL**HD**	X2	GRIDLINES	3.0"
1080P	DUAL CAMERA	GRIDLINES	3" LCD SCREEN

Caution

- Ensure you are using your Car DVR within your countries' road laws. Please make sure you are familiar with your local road legislation before use.
- Avoid leaving your Car DVR in direct sunlight for extended periods of time in an unventilated space.
- Please set time and date before you use this device to record.
- The system is to be used only for non-commercial use, within the limits permitted by the relevant laws
- Avoid using the Car DVR in the vicinity of any devices that emit radio interference (eg. Microwave Ovens).
- It is considered normal operation for the Car DVR to get warm during use.

Battery Warning

- Always charge the Car DVR using the provided charger. Improper charging of the Car DVR may result in failure of the internal battery.
- Never dismantle the Car DVR or expose the internal battery.
- Do not dispose of the Car DVR in fire.
- Dispose of the Car DVR observing local regulations being mindful of the internal battery.
- Do not attempt to replace or expose the internal battery.

Notes on Installation

1. It is advised that the Car DVR is installed near the rear view mirror, at the top centre of the windshield for optimal operation.
2. Make sure that the lens is within the range of the windscreen wiper to ensure a clear view when it rains.
3. Do not touch the lens with your fingers. Finger prints left on the lens will result in unclear videos or photos. If photos or videos are blurred, please clean the lens gently with a microfibre cloth.
4. Only use the included charging cable to power the Car DVR.

1. Introduction

Thank you for purchasing a NanoCam Plus Car DVR. We are certain that our product will give you trouble free operation while providing you with a safety feature that enhances your driving experience. Our products, like most after-market safety enhanced devices, are designed to assist and aid the driver, not to replace the manual function of the person operating the vehicle. Please read through these instructions before attempting to install this product.

For the latest manual and product updates, please visit our website at **www.nanocamplus.com.au** or **www.nanocamplus.co.nz**

1.1 Features

- Front Camera recording full high definition 1080P footage
- Rear camera recording high definition VGA footage
- Rear View monitor engages when your reverse gear is selected
- Dual channel simultaneous recording
- 3" colour screen
- 140° wide angle lens
- Emergency recording saves your footage when an impact is detected
- Supports Micro SD cards, class 6 and above up to 32GB

1.2 Package Contents

Car DVR	*Rear Camera*	*6M Extension Cable*	*12v Adpator*

1.3 Product Overview
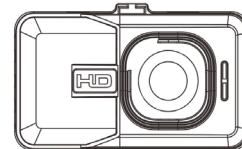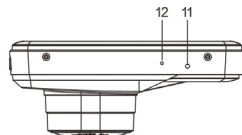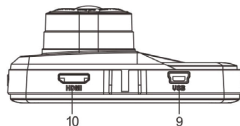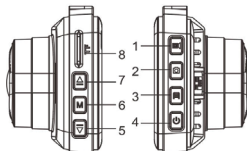
1. 🎥 OK/Record Button
2. 📷 Mode Button
3. 🔒 Footage Lock Button
4. ⏻ Power/Light Button
5. ▼ Down/Mute Microphone Button
6. **M** Menu Button

7. ▲ Up Button
8. 🗔 Micro SD Card Slot
9. USB Mini USB power socket
10. USB Micro USB
11. RESET Reset Button
12. MIC Microphone

2. Getting Started

2.1 Inserting Memory Card

With the Car DVR turned off and the screen facing towards you insert the memory card with the text on the Micro SD card facing away from you. Push the memory card in until a click is heard.

Note:
1. Do not remove or insert the memory card while the Car DVR is turned on as this may damage the memory card or corrupt the memory cards stored data.
2. Please use a Class 6 or higher rated micro SD card with a maximum capacity of 32GB.
3. Please format the Micro SD card before the initial use.
4. When removing the memory card, be careful as the card may eject quickly.

To remove the memory card

Ensure that the Car DVR is powered off, push the memory card until a click is heard and release the card to eject.

2.2 Installing the Car DVR

1. Remove the protective stickers from the Car DVR and the Suction Mount.
2. Slot the mount bracket into the socket on the top of the Car DVR and with the screen facing you, slide the bracket from front to back until the bracket locks in place.
3. With the suction mount tab in the up position attach the suction cup to the windscreen.
4. Press the mount base firmly against the windscreen and switch the suction mount tab to the down position.

2.2.1 Adjust the angle of the Car DVR

1. Select a flat and centred location near the number plate lamp at the rear of the vehicle to mount camera.

   IMPORTANT: When selecting this location, it is highly recommended that the image transmitted by the camera show the rear bumper and area behind the vehicle.
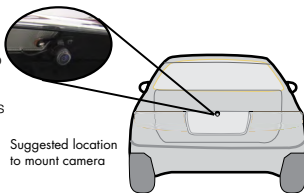
Suggested location to mount camera

2. Attach tape to the bracket of the camera, and drill a small hole for the first screw. *(Refer to Fig 2a)*
3. Use a screw driver to fix the first screw, but don't tighten it yet. *(Refer to Fig 2b)*
4. Insert camera wire through newly drilled hole and mount securely in place. *(Refer to Fig 2c)*
5. Mark the position suitable for the second screw and drill a small hole for it. *(Refer to Fig 2d)*
6. Fix the second screw and tighten both screws. *(Refer to Fig 2e)*

Fig 2a

Fig 2b

Fig 2c

Fig 2d

Fig 2e

2.2.2 Connecting the Rear Facing Camera
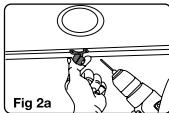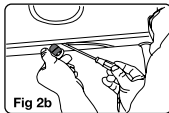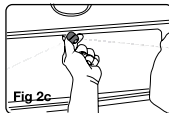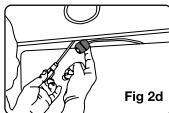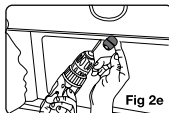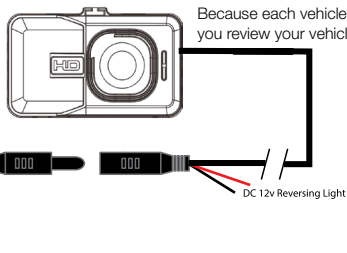
The rear camera needs to be attached to your vehicles reverse light power cable for the reverse monitor function.

Because each vehicle varies in the way that the reverse lights are wired, it is advised that you review your vehicles owner's manual before attempting to connect the reverse camera.

When connecting the camera, be sure connect the RED cable to your vehicles reverse lights positive wire, and connect the black cable to your vehicles ground connection.

2.2.3 Connecting to Power

Only use the included charger to power and charge the Car DVR.

DC 12v Reversing Light

1. Once the Car DVR is securely installed on your vehicle's windscreen, plug the 12v charger into your vehicle's cigarette lighter.
2. Run the cable along your vehicle's console and windscreen and plug the power plug into the Car DVR.

2.3 Powering the Car DVR On / Off

2.3.1 Auto Power On/Off

When the Car DVR is correctly installed and connected to your vehicle's 12v power supply, the Car DVR will automatically power up and start recording when the vehicle accessories are activated.

2.3.2 Manual Power On/Off and Reset

2.3.2.1 Manual Power On

Hold the Φ (Power) button on the top of the camera until the NanoCam Plus start up screen appears.

2.3.2.2 Power Off

Make sure that recording has been stopped and then press the Φ (Power) button on the top of the car DVR. After powering down the device please wait for 10 seconds before turning the Car DVR back on.

2.3.2.3 Reset the Device

If the Car DVR does not function normally, try restarting the car DVR. To restart the car DVR, with a flattened paper clip press the small button in the middle of the underside of the Car DVR.

2.4 Playing back video on a PC

To playback video files on your PC it is recommended to connect the Micro SD card (not included) directly to your PC using either a USB Micro SD card reader (not included) or if your PC has a SD card slot, a Micro SD/SD Card converter (not included). Once the **Micro SD** card is connected it should appear as a removable storage device. It is recommended that you transfer video files that you want to playback to a file on your computer before attempting to playback. This will reduce any delay in playback.

2.5 Initial Settings

Before using the Car DVR we recommend **Formatting the Inserted Micro SD Card** and setting the correct Time and Date.

2.5.1 Formatting the Inserted Micro SD Card

Formatting the Micro SD card will delete all information on the inserted Micro SD Card and prepare the card for use with the Car DVR.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Video Menu**.

3. Press the **M** (Menu) Button again to enter the **Settings Menu**.

4. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Format** setting and press ■◀ (OK) to select.

5. Select **SD Card** and press the ■◀ (OK) Button.

6. Select **OK** to confirm and press the ■◀ (OK) Button.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.
2. **Formatting your Micro SD Card** will delete all files from the card. Once these files have been deleted you will not be able to recover them.

2.5.2 Set Date / Time

Setting the Time and Date allows you to stamp your footage with the date and time as a reference.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Hold the **M** (Menu) Button for 2 seconds to enter the **Settings Menu**.

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Date** setting and press **OK** to select.

4. Use the ▲ and ▼ buttons to edit the selected digit and the ⬜ (Mode) button to confirm and progress to the next digit.

5. Once the time and date has been entered press the **M** (Menu) button to save and exit the **Date** setting.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.
2. Once the time and date is set it can be stamped onto your footage using the **Date Stamp** setting. Please see section **Date Stamp** for more details.

2.6 Using the Car DVR

2.6.1 Recording Video

When the Car DVR is connected to your vehicle's 12v power supply, the Car DVR will automatically power up and begin recording when you start your vehicle. During the start up the buttons will be unresponsive and the camera will take a moment to begin recording. The Car DVR will automatically stop recording and shut down when your vehicle is powered off.

Note:
1. Because of how some vehicles are wired, the recording may continue when the engine is switched off. If this happens, please manually turn off the Car DVR or remove the car adapter from the cigarette lighter when not in use.
2. The **recording loop** length can be configured to save a video file for every 3 or 5 minutes of recording. For information on how to adjust this setting please refer to the **Loop Recording** section of this manual.
3. The device saves the recorded footage and photos on to the inserted Micro SD Card. If the memory card capacity is full, the oldest file in the memory card will be overwritten.

2.6.2 Locked Recording

Locked Recording saves the current video file and protects it from being overwritten.

Note:
1. If the **G Sensor** function is enabled and a collision is detected, the device will automatically trigger the emergency recording and protect the current video file. Please refer to the section titled **G Sensor**.
2. The emergency recording file is created as a new file, which will be protected to avoid being overwritten by normal loop recording. If the inserted Micro SD Card fills up with Emergency Recording files the message "**SD Card Full**" will appear on the screen, the oldest emergency file will be automatically deleted when a new emergency recording file is created.

2.6.3 Reverse Monitor

The reverse monitor will display what is behind your vehicle in your blind spot when the reverse gear is selected. For this function to work correctly the rear camera must be correctly connected to your vehicle's reverse light.

2.6.4 Video Mode

When the Car DVR is powered up the video screen will start by default. In this screen recording will automatically start and can be stopped by pressing the ■◀ (OK) Button. To access the Settings Menu, ensure that the Car DVR is not recording then press the **M** (Menu) button.

2.7 Settings Menu

2.7.1 Video Quality

Image Quality sets the quality of both videos and photos taken by your Car DVR. Higher quality videos and photos will capture more ■◀ detail and will also produce larger files. To change the image quality, please follow the instructions below.
1. Press the ■◀ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Setting Menu** and highlight the **Image Quality** setting and press ■◀ (OK) to select.
4. Use the ▲ and ▼ Buttons to highlight your required setting, then press the ■◀ (OK) button to confirm your selection.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.
2. Higher resolution clips will create larger files which will fill the Micro SD Card faster.

2.7.2 Loop Recording

Loop recording allows you to set the duration that the camera will record before creating a new clip. To set the clip length please follow the instructions below.

1. Press the ▣ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Loop Recording** setting and press ▣ (OK) to select.
4. Use the ▲ and ▼ Buttons to highlight your required clip Length, then press the ▣ (OK) button to confirm your selection.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.
2. To avoid filling the card quickly it is advised to use the 2 or 3 minute options.

2.7.3 Motion Detection

Motion Detection is used to pause recording when no motion is detected in front of the camera, and to start recording when motion is detected again. To activate the **Motion Detection** setting follow the instructions below.

1. Press the ▣ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Motion Detection** setting and press ▣ (OK) to select.
4. Use the ▣ (OK) Button to turn OFF and ON **Motion Detection** indicated by the check box.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.7.4 G Sensor

The **G Sensor** defines the required force needed to trigger emergency recording. Once Emergency recording is triggered the current recording will be saved and protected from being saved over by the normal loop recording. To set the required sensitivity please follow the instructions below.

1. Press the ▣ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **G Sensor** setting and press ▣ (OK) to select.
4. Use the ▲ and ▼ Buttons to turn highlight your required sensitivity, then press ▣ (OK) to confirm your selection.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.7.5 White Balance

The **White Balance** setting is used to optimise your Car DVR to produce the best footage for the surroundings. To adjust the White Balance, please follow the instructions below.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Settings Menu.**

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **White Balance** setting and press ■◀ (OK) to select.

4. Use the ▲ and ▼ Buttons to turn highlight your required setting, then press ■◀ (OK) to confirm your selection.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.7.6 Auto Record

Auto Record setting is used to set whether the DVR starts automatically recording when you turn your vehicle on.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Settings Menu.**

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Auto Record** setting and press ■◀ (OK) to select.

4. Use the ■◀ (OK) Button to turn off and on **Auto Record** indicated by the check box.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.7.7 Record Audio

The **Record Audio** setting allows you to mute the microphone during recording, or set it to record. To set your recording preferences, please follow the instructions below.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Settings Menu.**

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Record Audio** setting and press ■◀ (OK) to select.

4. Use the ■◀ (OK) button to turn off and on **Record Audio** indicated by the check box**.**

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.7.8 Park Mode

Park Mode watches over your parked vehicle and will trigger a recording when an impact is detected.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Park Mode** setting and press ■◀ (OK) to select.
4. Use the ■◀ (OK) Buttons to turn OFF and ON **Park Mode** indicated by the check box.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.7.9 Set Date/Time

Setting the Time and Date allows you to stamp your footage with the time as a reference.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Date** setting and press OK to select.
4. Use the ▲ and ▼ Buttons to cycle the highlighted field, then press the ⊙ (Mode) button to confirm and highlight the next field.
5. Once you have entered the current time and date, press the **M** (Menu) button to save and exit the **Date** setting.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.
2. Once the time and date is set it can be stamped onto your footage using the Date Stamp setting. Please see section Date Stamp for more details.

2.8.0 Language

The **Language** setting is used to select your preferred Language in the menus. To set the systems language follow the instructions below.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.
2. Press the **M** (Menu) Button to enter the **Settings Menu.**
3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Language** setting and press ■◀ (OK) to select.
4. Use the ▲ and ▼ Buttons to highlight your required language, then press the ■◀ (OK) button to confirm your selection.

Note:
1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2.8.1 Date Stamp

Date stamp will stamp the current date and time onto the footage for future reference. To set the date stamp please follow the instructions below.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Settings Menu.**

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Date Stamp** setting and press ■◀ (OK) to select.

4. Use the ■◀ (OK) button turn off and on **Date Stamp** indicated by the check box**.**

Note:

1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

3. For instructions on how to set your DVR's internal clock, please see the section named **Set Date/Time (2.7.9)**.

2.8.2 Format

Formatting the **Micro SD** card will delete all information on the inserted Micro SD Card and prepare the card for use with the Car DVR.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Settings Menu.**

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Format** setting and press ■◀ (OK) to select.

4. Select **Confirm** and press the ■◀ (OK) button.

Note:

1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

2. Formatting your Micro SD Card will delete all files from the card. Once these files have been deleted you will not be able to recover them.

2.8.3 Default Settings

Default Settings is used to revert the Car DVR's settings to their default settings. To reset the camera to restore the default settings, please follow the instructions below.

1. Press the ■◀ (OK) Button to stop the Car DVR from recording.

2. Press the **M** (Menu) Button to enter the **Settings Menu.**

3. Use the ▲ and ▼ Buttons to navigate the **Settings Menu** and highlight the **Default Settings** setting and press ■◀ (OK) to select.

4. Select **Confirm** and press the ■◀ (OK) button.

Note:

1. Menus cannot be accessed while the camera is recording. Please stop the recording before attempting to access the menu.

3. Settings Menu

Settings	Image Quality	FHD	
		HD	
	Photo Quality	1M	5M
		2M	8M
	Loop Recording	2 Mins	5 Mins
		3 Mins	
	Motion Detection	On	Off
	White Balance	Auto	Incandescent
		Daylight	Fluorescent
		Cloudy	
	Exposure	-3	+1
		-2	+2
		-1	+3
		0	
	Auto Record	On	Off
	Screen Time out	10 Seconds	30 Seconds
		20 Seconds	Off
	Recording Audio	On	Off
	Park Mode	On	Off
	G-Sensor	High	Mid
		Low	Off
	Date	Set Date	
	Language	Chinese (S)	English
		Chinese (T)	
	Time Watermark	On	Off
	Flash	3 Seconds	10 Seconds
	Format	Confirm	Cancel
	Default Settings	Confirm	Cancel
	Firmware	Firmware Version	

Warranty Terms & Conditions

Our goods come with guarantees that cannot be excluded under the Australian & New Zealand Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is provided in addition to your rights under the Australian & New Zealand Consumer Law.

NanoCam Plus warrants that this product is free from defects in material and workmanship for a period of 12 months from the date of purchase or for the period stated on the packaging. This warranty is only valid where you have used the product in accordance with any recommendations or instructions provided by NanoCam Plus.

This warranty excludes defects resulting from alterations of the product, accident, misuse, abuse or neglect.

In order to claim the warranty, you must return the product to the retailer from which it was purchased or if that retailer is part of a National network, a store within that chain, along with satisfactory proof of purchase. The retailer will then return the goods to NanoCam Plus. NanoCam Plus will repair, replace or refurbish the product at its discretion. The retailer will contact you when the product is ready for collection. All costs involved in claiming this warranty, including the cost of the retailer sending the product to NanoCam Plus, will be borne by you.

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