

Dual Channel Vehicle Drive Recorder



User manual

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About this Guide

The content in this document is for information purpose and is subject to change without prior notice. We have made every effort to ensure that this User Guide is accurate and complete. However, no liability is assumed for any errors or omissions that may have occurred. The manufacturer reserves the right to change the technical specifications without prior notice.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

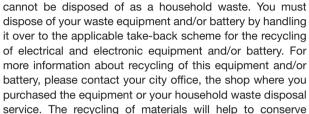
WEEE Notice

Disposal of Waste Electrical and Electronic Equipment and/ or Battery by users in private households in the European Union

Union
This symbol on the product or on the packaging indicates that this



WEEE





Battery natural resources and ensure that it is recycled in a manner that protects human health and environment.

CE Regulatory Notice

The product herewith complies with the requirements of the Low Voltage Directive 2014/35/EU, the EMC Directive 2014/30/EU, battery directive 2006/66/EC, the R&TTE Directive 1999/5/EC and the RoHS Directive 2011/65/EC.

Battery Warning

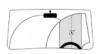
- Never dismantle, crush, or pierce the battery, Do not expose battery to a high temperature environment.
- Only replace the battery with a genuine Snooper battery.
- Keep the battery out of reach of children.
- Batteries may explode if exposed to naked fire. Never dispose
- of batteries in a fire.
- There are no user serviceable parts inside the DVR-5, the battery can only be replaced by an authorised Snooper technical.
- Disposed of used batteries observing local regulations.

Notes on Installation

- Please measure the front windshield viewing area, do not restrict the drivers view of the road ahead. Install the device below the rear view mirror (the centre of the front windshield). We recommend that the sky and the land occupied by the screen 50%, fix the car bracket and then adjust the device so that the lane is aligned with the screen. The correct installation enables the device to maximize the accuracy of LDWS.
- Rear camera should be installed at the central, higher right position of the front windshield to have the best viewing. After installation, make sure the lens must be positioned at the front direction, the lens in the wrong direction will cause the video screen upside down.
- Make sure that the lens is within the wiping zone of the windscreen wiper to ensure a clear view even when it rains*
- Do not touch the lens with your fingers. Finger grease residue may be left on the lens and will result in unclear videos or pictures. Clean the lens on a regular basis.
- Do not install the device on a tinted film window. Doing so may damage the tint film.
- 6. Do not restrict the drivers view of the road ahead.
- This product is suitable for light windshield or light colour heatresistant film windows, the video quality will be reduced if the camera(s) are installed on dark tinted windows.
- 8. Use the products supplied, failure to use the correct power cable will invalidate your warranty.
- * Do not mount the dash cam in Zone A as this may contravene local traffic laws.



RHD



LHD

Caution

- Is is not safe for the driver to operate this device while the vehicle is in motion.
- Adjust the time zone before you use this device.
- The results of GPS positioning are only for reference, and should not affect the actual driving situation.
- GPS positioning accuracy may differ depending on weather and geographical restrictions such as high buildings, tunnels, underpasses, or forests. GPS satellite signals cannot pass through solid materials (except glass). Solar reflective glass will also affect the performance of the GPS satellite reception.
- GPS reception performance on each device may differ.
- The values displayed in this device, such as speed and position, are for guidance only due to the influence of surrounding environment.
- This device gets warm when in use; this is normal.
- Improper use or operation of the product may result in damage of the product or its accessories and this will void the warranty.

Before you start using the product, it is assumed that you agree to the above statement.

1 Introduction

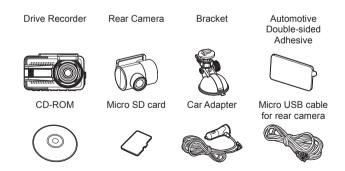
Thank you for purchasing this advanced drive recorder. This product is specifically designed for real time video recording when driving.

1.1 Features

- 2K HD recording videos (2560x1440P@30fps)
- 3.0" TFT-LCD colour screen
- Wide-angle dual camera
- Collision Detection, when a collision is detected, the device will automatically trigger the emergency recording
- Parking Mode, the system will automatically power on and start recording when the device senses the vibration
- Multifunction traffic safety reminder
- Support SDHC class 10 and micro SD memory storage 16GB or above (supports up to 32GB)

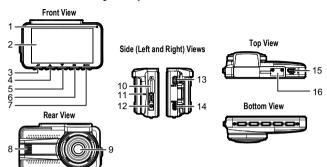
1.2 Package Contents

The package contains the following items. If any items are missing or damaged contact your dealer immediately.



1.3 Product Overview

1.3.1 Main Body Graphic



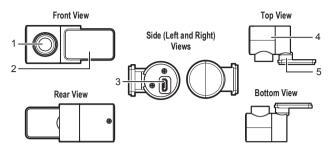
No.	Item	
1	LED Indicator	
2	LCD Colour Screen	
3	Menu / Back Button (⋿ / ⑤)	
4	Playback button /up button (△)	
5	Snapshot / Down Button (O / V)	
6	Emergency Recording / Confirm Button (/)	
7	Switch Camera Button (🖼)	
8	Speaker	

No.	Item	
9	Wide Angle Lens	
10	Memory Card Slot	
11	Microphone	
12	Power Switch	
13	Power Connector Port	
14	HDMI Connector Port	
15	Micro USB Connector Port	
16	Bracket Socket	

Note:

Please press the button (3~7) according to the diagram notice shown on screen.

1.3.2 Rear Camera Graphic



No.	Item	
1	Wide Angle Lens	
2	Base	
3	Micro USB Connector Port	

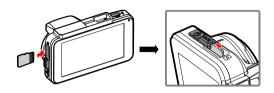
No.	Item	
4	Camera Rotation Shaft	
5	Base Rotation Shaft	

2 Getting Started

2.1 Storage Media

2.1.1 Insert the Memory Card

Insert memory card with the contacts facing forward see the picture as below:



Carefully Insert the memory card into the device until the lock can be smoothly slid. The card will protrude in normal use, damage may occur if pressed too hard.

2.1.2 Remove the Memory Card

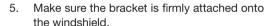
If the device is powered on, please power off first and wait for the device to switch off completely before removing the memory card. Please refer **Manual Power On/Off** (2.5.2).

- Do not remove or insert the memory card when the device is turned on. This may damage the memory card.
- 2. Support SDHC class 10 and memory storage 16GB or above (support up to 32GB).
- 3. Please format the micro SD cards before the initial use see section 4.2 Menu items, Format.

2.2 Installing

2.2.1 Mount the Device to Windshield

- Push the bracket into bracket slot on top of device until a click sound is heard.
- Connect to the vehicle power supply then power on to enter preview screen and confirm the field of view. Then clean the surface of the windshield with alcohol to ensure that the adhesion surface is clean. Please refer to Connecting to Power (2.3.1), and Powering the Device On / Off (2.5).
- Remove the protective layer on the bottom of the bracket.
- 4. Release the lever of the bracket, install the bracket onto the windshield, then lock the lever to complete the installation.







- Do not install the device on a film tinted window. Doing so may damage the tint film.
- This product is suitable for light windshield or light colour heatresistant film windows, it will affect video quality if installed on the dark windows or dark heat-resistant film windows.
- 3. Remove the protective layer on the bottom of the bracket.

2.2.2 Adjust the Device

1. Loosen the knob to swivel the device vertically.

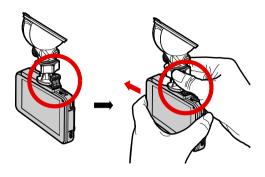
Knob

2. Loosen the knob to swivel the device horizontally up to 360°.

3. Then tighten the knob to make sure the device is securely locked in place.

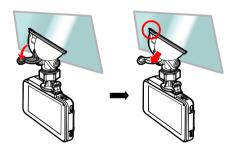
2.2.2.1 Dismount the Device

To remove the device, press the lever and slide the camera to the left to remove device as the picture shown.



2.2.2.2 Dismount the Bracket

To dismount the bracket, first release the lever then pull the small tag to release the vacuum and to dismount the bracket.

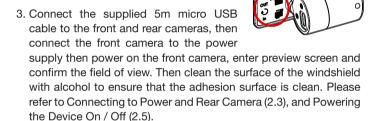


2.2.3 Mount Rear Camera to the Windshield

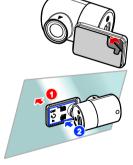
1. Remove the white backing paper on the double side sticker, attach it onto the base of rear camera, then press

doubled side tape to ensure firmly stick.

 Adjust rear camera as the picture shown: please check base text is in the right direction to ensure the recording screen direction is in right direction before installation.



- Remove the red paper on the double side sticker.
- Install rear camera onto the windshield, press the bracket to ensure it is firmly attached.



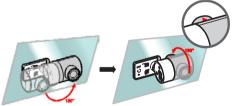
Note:

- Do not install the device on a film tinted window. Doing so may damage the tint film.
- This product is suitable for light windshield or light colour heatresistant film windows, it will affect video quality if installed on a dark window or dark heat-resistant film windows.
- 3. Remove the protective layer on the bottom of the bracket.

2.2.4 Adjust Rear Camera

2.2.4.1 Record Rearview (interior)

1. Adjust rear camera as shown in the image below. If the camera is set to record the interior of the vehicle, to record the exterior of the vehicle turn the rotation shaft 180° and then rotate rear camera 180°. Point the lens toward the rear of the car. Note that the mark should be in the upper position to ensure the correct camera orientation.

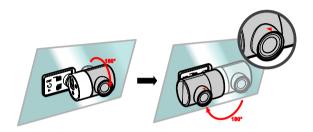


2. Adjust the rear camera angle by using the preview screen.



2.2.4.2 Record inside the Vehicle

 Adjust rear camera as the picture shown. If the camera is ready to record the exterior of the vehicle, turn the rotation shaft 180°, and then rotate rear camera 180°, point the lens toward inside of the car. Note that the mark shall be in the upper position to ensure the correct camera orientation.



Users can adjust rear camera angle by using the preview screen.



Note: When viewed through the DVR-5HD screen the image from the rear camera is mirrored. When the image from the rear camera is viewed via a PC the image is true.

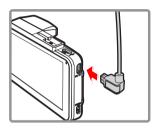
Note: We recommend users to disconnect micro USB from rear camera before adjusting.

2.3 Connecting to Power and Rear Camera

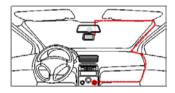
2.3.1 Connecting to Power

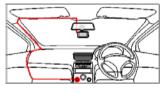
Use only the supplied power connector for this device and charging the built-in battery.

 Connect one end of power connector to power connector port on the device. USB port input: DC 5V / 1.0A.



Plug the other end of the car adapter to the cigarette lighter socket of your vehicle. Once the cable has power, the device automatically turns on. Car charger input: DC 12 / 24V.



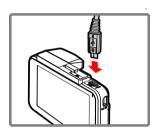


Note: Please do not to block the driver's field of view, install the device under the driving mirror (upper central of the front windshield). And we recommend that the sky and the land occupied by 50% in the recording screen, please adjust the driver recorder so that the alignment icon is aligning the driving lane. Proper installation enables the device to maximize the efficiency and improve the accuracy of LDWS.

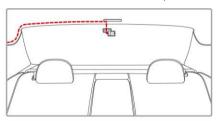
2.3.2 Connecting to Rear Camera

Use the micro USB cable in the product package to connect the camera.

1. Connect micro USB to drive recorder USB port.



2. Connect micro USB to rear camera USB port.



Note:

Install rear camera at upper central position of the rear windshield.

Battery Status Indicator:

lcon	Description	
	Full battery power.	
	2/3 battery power.	
	1/3 battery power.	
	Out of battery power.	
	Battery is charging.	
	Connect the car adapter to charge	

Note:

- Use the products supplied power charger only, please do not use other brand of power charger, incorrect power chargers may cause the battery to prematurely fail or explode
- 2. Please take note if the ambient temperature reaches 45°C or above, the car adapter will still supply power to device, but it will not charge the Li-polymer battery. This is a normal characteristic of Li-polymer and is not a malfunction.

Low Voltage:



Note: If the device is connected to the car adapter and turned on, and the screen displays a charging reminder symbol such as the image above, it means that the available voltage is too low. Please wait for a few minutes until the charging reminder symbol disappears before entering the video recording mode to prevent invalid recording or file damage.

2.4 LED Indicator

Status Explanation	LED Indicator colour
Power off, battery charging	Red
Power off, battery full charged	LED light off
Power on, battery charging	Red
Power on, battery full charged	Green
Standby / Standby and screen off	Green
Recording/ Recording and screen off	Flash red

2.5 Powering the Device On / Off

2.5.1 Auto Power On/Off

If the drive recorder is connected to the vehicle power supply, once you start the car engine, the drive recorder will automatically power on and start recording. Once the vehicle engine shuts down, the device automatically saves the recording and turns off the power within 10 seconds.

2.5.2 Manual Power On/Off and Reset

2.5.2.1 Manual Power On

Slide the **power switch** up and make sure that the power switch locks on the memory card slot.



2.5.2.2 Manual Power Off

Slide the **power switch** down and the device starts its power off sequence. Do not power on the device when it is in the power-off sequence, or the recorded file may become corrupt.



2.5.2.3 Reset the Device

In case the device fails to function normally due to unknown causes, slide the **power switch** and verify the memory card is in the removable state; wait for 10 seconds and slide the power up switch again to restart the device.

2.6 Initial Settings

Before using the device, we recommend you setup the correct Time zone, Date and Time.

Note: Please note that if you press the button during recording, the system will stop recording and enter OSD menu. Make sure the recording is already stopped then continue operating the menu.

2.6.1 Set Time zone

To set the time zone, do the following:

- 1. Press the E button to enter the OSD menu.

- Press the button to return to recording screen.



Greenwich Mean Time (GMT) map of time zones:



- If Time Sync. is on, device clock will be calibrated via satellite clock signal based on Set Timezone. Please refer to Satellite Synchronization (4.2).
- If satellite positioning is not successful, device clock will run based on user defined time.

2.6.2 Set the Date / Time

To set the correct date and time, do the following:

- 1. Press the putton to enter the OSD menu.
- Press the ∠ / ✓ button to adjust the value, and then press the ⊚r
 button to set the next field.



4. Repeat step 3 until the date and time setting is completed.

Note:

To ensure the accuracy of the video file time, please reset the date and time when the battery is completely discharged or when the device has not been used for over 7 days.

3 Using the Drive Recorder 3.1 Automatic Record

If the drive recorder is connected to the vehicle power supply and power switch is in the On position once you start the car engine, the drive recorder will automatically power on and start recording. Recording will automatically stop when the engine is switched off.

Note:

- Some vehicle power supplies don't turn on / off automatically with the car engine, if the device can not automatically power on/off with the car engine, please manually connect the power supply with the vehicle power, and then power on, or manually power off the device and then release the connector with the car power supply.
- 2. The device can be configured to save a video file for every 1 or 3 minutes of recording. Please refer to **Record Interval** (4.2).
- All the videos and photos are saved in the memory card, if memory card is full, loop recording will be generally overwrite the oldest video file.

3.1.1 Resolution

- Front Camera: 2K HD@30 (1440P 30fps) / FHD@60 (1080P 60fps) / FHD HDR (1080P HDR 30fps) / FHD@30 (1080P 30fps) / HD@120 (720P 120fps).
- Rear camera resolution setting is FHD@30 (1080P 30fps), the resolution will not change by front camera resolution setting.

3.1.2 The Recording Screen



No.	Icon	Item	Description
1	00:10	Recording Duration	Indicates the video current duration.
2	2016/01/01 12:00:10	Date / Time	Indicates the current recording date and time.
3		Menu Button	During video recording, press the button to enter the OSD menu.
4	6	PIV (Picture in Video) Button	Press to capture video screen shots from the front camera.
5	<u> </u>	Emergency Recording Button	During video recording, press the OCS button to enter emergency recording mode. Please refer to <i>Emergency Recording</i> (3.1.3).

6	-	Switch Camera Button	Press to switch VIV screen.
7		Voice Record icon	Indicates voice recording sets as off, the sound will not be recorded.
8	FHD @30	Resolution icon	Indicates the video resolution.
9	CAN)	Satellite Positioning icon	Indicates the strength of satellite positioning. If the icon shows up on screen, it indicates that the device cannot complete the satellite positioning.
10		Battery Power icon	Indicates battery or device charging status.
11		VIV (Video in Video)	Indicates rear camera recording screen.

3.1.3 Emergency Recording

To start the Emergency Recording, do the following:

 During Video Recording, press the OK button to enter emergency recording mode, the "Emergency" message will be shown immediately on the upper left corner of the screen, and the recorded file will be protected.



The emergency video recording length
is same as the recording interval setting. When the emergency
recording length reaches the setting, the system will return to the
general recording mode. Please refer to **Record Interval** (4.2).

- If the Collision Detection function is enabled and a collision is detected, the device will automatically trigger the emergency recording. Please refer to Collision Detection (3.4.4).
- 2. The emergency recording file is created as a new file, which will be protected to avoid being overwritten by normal loop recording. A memory card can save up to 20 emergency video files if record interval time is 1 minute, and save up to 10 emergency video files if record interval time is set as 3 minutes.
- 3. The notice message of "Emergency files are full" will pop up on the screen when the emergency recording folder is full, and the later emergency files will be saved in the Normal Video folder which will be over written if memory is full. Thus, if you want to keep newest emergency video file, please manually delete the oldest files in the emergency video folder to release more capacity. Please refer to File Deletion (4.2).

3.3 Picture in Video

You can also use this device to take snapshots of the current scene.

- 1. In recording status, press to capture recording screen shots from the front lens.
- 2. When the icon shows in the central of screen, it means the screenshots is completed.

- 1. The screen shots image resolution quality is depending on the video resolution setting. Please refer to **Resolution** (4.2).
- 2. The definition of picture in video by this product, the picture resolution is limited by the speed of the target object and changes in ambient lighting. The photograph function is better used for taking still pictures in accident scenes or when the car is stopped to wait for a traffic light.
- 3. It is available only for the front camera if user wants to take pictures during recording.

3.4 Driving Safety

The following driving safety function is for reference only. Drivers are advised to exercise discretion based on actual road conditions.

- The **Driving Safety** function is limited to triggering no more than two alarms at the same time. If a voice and alert message have been triggered, any other alarm will be ignored until either of the two is settled.
- Satellite positioning must be completed before functions such as Speed Position Management, Speed Limit Alert, LDWS and FCWS to be enabled. Be sure to check that Satellite positioning has been completed prior to using the product.
- The detections of LDWS, FCWS and FCMD may be inaccurate when used in rain, at night or in environments of insufficient lighting. Drivers are advised to exercise discretion based on actual road conditions.

3.4.1 Speed Limit Alert

If the **Speed Limit Alert** function is enabled, this product produces audible alert and screen message once your car's location is determined by GPS and its running speed exceeds the set limit. To set the Speed Limit Alert, do the following:

- 1. Press the button to enter the OSD menu.
- 2. Press the \(\times \) button to select Speed Limit Alert, and then press the OK button to enter the function menu





- 4. Press the Dutton to return recording screen.
- The alarm screen turns red to remind you to slow down if you are driving faster than the speed limit.



3.4.2 Parking Mode

To monitor the vehicle when it is parked, you can activate **Vibration Detection**, or **Motion** and **Collision Detection**. Follow the steps below to change the settings for Parking Mode:

- 1. Press the E button to enter the OSD menu.
- 2. Press the / button to select Parking Mode, and then press the to enter the function menu.





3. Press the ⚠ / ♥ button to configure Parking Mode (Vibration Detection / Motion and Collision

Detection / Off), and then press the $\ensuremath{\text{OIK}}$ button to complete setting.

Vibration Detection:

- If disconnected external power supply when the device is powered on, the system alert message "Wait 10 seconds to enter Vibration Detection." This means the system will power off and enter Vibration Detection automatically in 10 seconds.
- Once Vibration Detection Mode is triggered, when the device detects any collision, it will automatically power on and start recording, the event will be recorded for 60 seconds (per file).
- In this mode, drive recorder is powered off until event happens. This mode is more power saving.

Motion and Collision Detection:

- If disconnected external power supply when the device is powered on, the system alert message "Enter parking

mode after 10 sec." This means the system will enter Motion and Collision Detection automatically in 10 seconds, and then LCD screen turn off after 30 seconds (the device will turn off the screen temporarily, but still in standby detection status. Press any button to turn on the operation screen).

- In the Motion and Collision Detection mode, when the device detects any motion in front of lens, or when the device detects collision, the automatic record will be activated.
- In this mode, when the device detects collision or any motion in front of lens, the video recording will be triggered and the event will be recorded for 10 seconds (per file). If the event lasts more than 10 seconds, the device will keep recording up to 2 minutes.
- In this mode, the device is in standby mode until event happens. This mode will consume more battery power.
- Off: No parking monitoring activated.
- 4. Press the Dutton to return recording screen.

- When Vibration Detection or Motion and Collision Detection is on, the device records events by front camera only.
- 2. If battery in a fully charged condition, it can record about 20 minutes video in Motion and Collision Detection mode. As the device is used, the battery storage capacity will decrease gradually. This is a normal phenomenon for the battery.
- 3. The video files taken in Parking Mode will be saved in "Parking Mode" folder, which will not be overwritten by normal video files. However, if the remaining memory capacity is not enough to save the last normal video file, the oldest Parking Mode video will be deleted. Please always make sure your backup Parking Mode video files.
- 4. Parking Mode folder can save about 40 parking mode files, when parking mode files are full, loop recording will overwrite the oldest file.

3.4.2.1 Speed Cam Alert

If the Speed Cam Alert function is enabled, once your car's location is determined by GPS and approaches a speed camera, this product produces audible alert and screen message.

To enable the Speed Cam Alert, do the following:

- 1. Press the button to enter the OSD menu.
- 2. Press the 🗘 / Dutton to select Speed Cam Alert, and then press the 🌣 button for entering function menu.
- 3. Press the \(\int \setminus \)/\to button to select \(\mathbf{On} \), and then press the \(\mathbf{OK} \) button to enable the function.
- Press the button to return recording screen.
- The alarm screen turns red to remind you to slow down if you are driving faster than the speed limit.







3.4.3 Collision Detection

If the **Collision Detection** function is enabled, this device begins emergency recording once it detects any collision. Sensitivity of the Collision Detection function is set to Normal by default, if user wants to change the settings of Collision Detection, do the following:

- 1. Press the button to enter the OSD menu.
- 3. Press the _____ / ____ button to change the sensitivity of this device's collision detection (High Sensitivity / Normal Sensitivity / Low Sensitivity / Off), and then press the ②K button to enter the function menu.
- 4. Press the button to return recording screen.



- 1. The emergency recording file is created as a new file, which will be protected to avoid being overwritten by normal loop recording. If record interval time is set as 1 minute, a memory card can save up to 20 emergency video files, and save up to 10 emergency video files if record interval time is set as 3 minutes.
- 2. The alert message of "Emergency files are full" will pop up on the screen when the emergency recording folder is full, and the later emergency files will be saved in the Normal Video folder which will be over written if memory is full. Thus, if you want to keep newest emergency video file, please manually delete the oldest files in the emergency video folder to release more space. Please refer to File Deletion (4.2).

3.4.4 Driver Fatigue Alert

If the **Driver Fatigue Alert** function is enabled, this product produces audible alert and screen message one hour after it has begun recording and repeats the alerts every half hour afterwards. To enable the Driver Fatigue Alert, do the following:

- 1. Press the E button to enter the OSD menu.
- 2. Press the / button to select **Driver Fatigue Alert**, and then press the to enter the function menu.
- 3. Press the △ / ▼ button to select On, and then press the ◎Ⅸ button to enable the function.
- 4. Press the Doutton to return recording screen.
- This product produces audible alert and screen message when **Driver** Fatigue Alert activates.







3.4.5 Headlight Warning

The Headlight Warning function produces audible alert and screen message when it detects poor lighting conditions through the recording displays of this device, including driving in rainy or cloudy weather, at night, and in basements, car parks, and tunnels. To enable the Headlight Warning, do the following:

- 1. Press the button to enter the OSD menu.
- 3. Press the \(\triangle / \) button to select On, and then press the **OK** button to enable the function.
- 4. Press the Doubton to return recording screen.
- This product produces audible alert and screen message when Headlight Warning activates.





3.4.6 LDWS

Once your car's location is determined by GPS and the **LDWS** function is enabled, this device produces audible alert and screen message when you drive off of or change lanes at speeds over 70 km/h (43 mph).

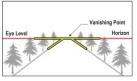
To enable the LDWS (Lane Departure Warning Systems), do the following:

- 1. Press the button to enter the OSD menu.
- 2. Press the \(\times / \) button to select LDWS, and then press the OK button to enter the function menu.
- 3. Press the △ / ✓ button to select On, and then press the ◎Ⅸ button to enable the function.



- 4. Press the ← button to return recording screen.
- 5. After enabling LDWS, the screen will display traffic lane align icon, please adjust the drive recorder so that the horizontal line and the eye level are overlapped and the slash lines are centered in the driving lane.





This product produces audible alert and screen message when LDWS activates.



- 1. Please measure front windshield viewing area, do not block the driver's forward field of vision, and install the device below rearview mirror (upper central of the front windshield). We recommend that the sky and the ground occupied 50 % of the video screen, install the bracket then adjust the device to make the lane is aligned to the lane alignment icon. Correct installation makes the device to maximize the efficiency and improve the accuracy of LDWS.
- Make sure that traffic lane align icon will not be obscured other things (e.g.hood). It may cause misjudgment if the endpoint is obscured.

3.4.7 FCWS

Once your car's location is determined by GPS and the FCWS function is enabled, this device produces audible alert and screen message when you drive at speeds over 60 km/h (37 mph) and are less than 15m away from the car in front of you. If the device does not have GPS, and the leading vehicle distance is below 15 meters, it will also produce a warning screen and voice reminder. To enable the FCWS (Forward Collision Warning System), do the following:

- 1. Press the button to enter the OSD menu.
- 2. Press the \(\sum / \subseteq \) button to select FCWS, and then press the **OK** button to enter the function menu.
- 4. Press the button to return recording screen.
- This product produces audible alert and screen message when FCWS activates.





3.4.8 FCMD

If FCMD is enabled then the device will determine if an object (car) in in front of the device, within 0.3~4 meters.

If the front object moves, forward, but the device does not start to move, after 3~5 seconds the device will emit an audible warning and display a message on the LCD screen.

To enable FCMD (Front Car Movement Detection) do the following:

- 1. Press the button to enter the OSD menu.

- 4. Press the button to return recording screen.
- This product produces audible alert and screen message when FCMD is activates.





Note:

The device detects change at the front the vehicle to determine FCMD alerts. If the device stationary but the front object moves a little the device will alert. Please be alert and use your judgement to assess the actual driving condition.

3.5 File Playback

3.5.1 Playing Videos

Playback video record files as follows:

- 1. Press the E button to enter the OSD menu.
- 2. Press the ______/ \top button to select File Playback, and then press the OK button to enter the function menu.
- 3. Press the ____ / ___ button to select Video / Parking Mode / Emergency, and then press the © K button for entering menu.



4. Press ______/ ____ button to browse video files, select the video file and then press the ①ば button to enter Playback Mode. If thumbnail shows ______ bicon, it indicates that the file is dual-lens recording. In the Playback Mode, you can use the ______ button to switch the front and rear lens recording file.



3.5.2 Viewing Pictures

View pictures as follows:

- 1. Press the button to enter the OSD menu.
- 2. Press the / button to select

 File Playback, and then press the

 ©IX button to enter the function menu.
- 3. Press the \(\times \) / \(\subseteq \) button to enter Picture, and then press the OK button for entering menu.
- Press / Dutton to browse the photo file, select the file and then press OK button to enter the photo Playback Mode.





5. Press the Prepetitively to return recording screen.

3.5.3 Playback Screen

Video Playback Screen



Picture Playback Screen



No.	lcon	Item Description	
1	1/130	File Number / Total File	Indicates of the total number of files.
2	D> 4\	Fast Forward / Fast Rewind icon Indicates video fast-forward an rewind status.	
3	1500014TTO1A ENTERIOS104	File Name Indicates the file name of video picture.	
4	Û	Return	Press the Dutton to return preview screen of video or picture. Press the Dutton repetitively to return recording screen.
5	₩ . <	Fast Rewind / Previous File Button	When playing videos, press the △ button will reverse the playback. Press △ button to view previous file.
6	₩ / ♡	Fast Forward / When playing videos, press the ∇ button to fast forward playing videos. Press → button to view next file.	
7	DDD / DD	Playback/ Pause button Press the @I3 button to play of pause the video.	

No.	Icon	Item	Description		
8	J.	Lens Switch Button Button In playback mode, press button to switch files with dual recording file.			
9		Battery icon	Indicates Battery or charging status.		
10	00x10/1 01x00	Playback Duration / Total Duration	Indicates video playback time and total duration.		
11	2016/01/01 12:00	Date and time	Indicates the date and time of film.		
12		Previous File	When viewing pictures, press the button will switch over to the previous file.		
13	\triangleright	Next File	When viewing pictures, press the		

3.6 Deleting Files

To delete file(s), do the following:

- 1. Press the button to enter the OSD menu.



- Delete One:
- Press the _____ / ____ button to select **Delete One**, and then press ______ button to enter the menu.



- Press ⚠ / ▼ button to browse files, select the files you want to delete and then press ⊚t button to enter the menu.



- Press the ⚠ / ▼ button to select item, and then press the **②K** / **>** button to confirm or cancel the selection.



• Delete All:



- Press the △ / ▼ button to select item, and then press the ©K / ⇒ button to confirm or cancel the selection.



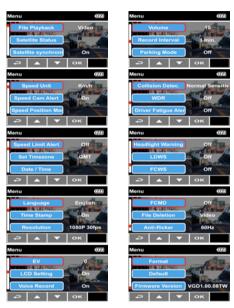
Press the repetitively to return recording screen.

- Only front camera thumbnails will be display in Menu, if you choose to delete the file has the D icon, and then the files records with rear lens will be deleted.
- Deleted files cannot be recovered. Ensure the files have already backup before deletion.

4 Adjusting the Settings

4.1 Using the Menu

You can customize the general settings via the on-screen display (OSD) menus.



- 1. Press the E button to enter the OSD menu.
- 2. Press the / button to select menu item, and then press the to enter the function menu.
- 3. Press the △ / ✓ button to select or adjust the value, and then press the ⊙K button to confirm setting.
- Press the Dutton to return to the recording screen.

4.2 Menu Items

Refer to the below table for details of main menu and function list.

Menu option	Description	Available option
File Playback	Select the file category that you want to view.	Video / Parking Mode / Emergency / Picture
Satellite Status	Displays the current state of the satellite reception.	
Satellite Synchronization	If the satellite time is enabled, the drive recorder clock will synchronize according to the satellite time zone you set. When you turn on this feature, it will display the satellite time preferentially, and cannot be manually changed.	On / Off
Speed Unit	The system displays the speed setting unit.	Km/h / mph
Speed Limit Alert	Set a customized maximum speed limit. When the vehicle speed exceeds the maximum, an audible alert is automatically triggered and a warning message is displayed on the screen.	Press the \(\times \) / \(\times \) button to set the speed limit. You can set off, or set the speed limit from 50 to 200km/h (30 to 125mph)

Menu option	Description	Available option
Set Timezone	Set the time zone you are in.	Press the \(/ \) button to set the satellite time. You may customize it between GMT -12:00 \(~ GMT +14:00 \)
Date / Time	Set the date and time.	Press the \(\triangle / \) button to adjust the value, and then press the \(\circ \)\(\triangle \) button to set the next field, and complete setting
Language Settings	Language setting.	English / Deutsch / Nederlands / Français / Español / Italiano
Time Stamp	If the time stamp is enabled, recording files or photos will show the date and time.	On / Off
Resolution	Setting of video resolution.	2K HD@30 (1440P 30fps) / FHD@60 (1080P 60fps) / FHD HDR (1080P HDR 30fps) / FHD@30 (1080P 30fps) / HD@120 (720P 120fps)
EV	Setting of exposure value.	Press the \(\triangle \) / \(\triangle \) button to set the exposure value. It can be set between -2 \(\triangle +2 \)
LCD Setting	Set LCD off time. Device screen will be off after a set time if no operation is detected during the standby or record mode. Press any button will switch it on. (Recording is not affected when screen is off).	On / Off After 30 sec. / Off After 3 min. / Off
Voice Record	Setting for activating audio in the video.	On / Off

Menu option	Description	Available option	
Volume	Adjust the sound volume.	Press the \(\triangle / \triangle \) button to set the volume. It can be set between 1 ~ 10	
Record Interval	Save respective video files in a length of the selected duration.	1 min. / 3 min.	
	Vibration Detection: If Vibration Detection is enabled, please disconnect the external power supply device in power on status, it will automatically power off and enter the detection mode after 10 seconds. The device will automatically power on and start recording when the device detects vibration.		
Parking Mode	Motion and Collision Detection: If Motion and Collision Detection is enabled, please disconnect the external power supply device in power on status, it will automatically power off and enter the detection mode after 10 seconds. The device will automatically power on and start recording when the device detects motion and collision.	Vibration Detection / Motion and Collision Detection / Off	
	Off: No parking monitoring activated.		
Collision Detec.	If Collision Detection is activated, this device starts emergency recording once it detects any collision.	High Sensitivity / Normal Sensitivity / Low Sensitivity / Off	

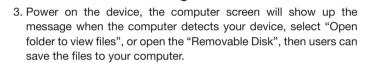
Menu option	Menu option Description	
WDR	Present a crisp and clear picture quality with harmonious contrast in a high contrast, high discrepancy environment.	On / Off
Driver Fatigue Alert	When Driver Fatigue Alert is enabled, audible alert and screen message will be activated 1 hour after the device is powered on, with a repetition every 30 minutes.	On / Off
Headlight Warning	When Headlight is activated, device will issue an audible alert and screen message reminding that insufficient brightness is sensed on the recording face.	On / Off
LDWS	Once your car's location is determined by GPS and the LDWS function is enabled, this device produces audible alert and screen message when you drive off of or change lanes at speeds over 70 km/h (43 mph).	On / Off
FCWS	When FCWS is activated after satellite positioning, device will issue audible alert and screen message when vehicle speed is above 60 km/h (37 mph) and the distance with the front vehicle is less than 15m.	On / Off
FCMD	If FCMD function is enabled, the device will determine it from front car about 0.3 ~ 4 meters. When the front object moves about 3 ~ 5 seconds and the car did not start to drive forward, the device will issue audible alert and screen message.	On / Off

Menu option	Description	Available option
File Deletion	Delete the file(s).	Video / Parking Mode / Emergency / Picture
Anti-flicker	Domestic power supply varies by area. It is recommended that you should check the "Table of voltage and frequency of different countries" for the correct setting.	60Hz / 50Hz
Format	Format the memory card. All the files in the card will be erased.	Yes / No
Default Setting	The system reverts to the default setting.	Yes / No
Firmware Version	Indicates the current firmware version.	

5 Connecting to Other Devices5.1 Connecting to the Computer

You can connect the device to a desktop computer or notebook to transfer or view files.

- 1. Connect micro USB cable to the device micro USB port.
- 2. Connect the other end of USB cable to an available USB port of your computer.



- This only indicates the device can connect to the computer; micro USB cable is not included in standard package.
- Under dual-lens mode, the recording files will be saved separately in different folders, "F" folder is for front camera files, "R" folder is for rear camera files.
- 3. If user only deletes front camera files with **D** on computer, then the rear camera files would be unavailable, also it couldn't be overwritten by loop recording. To avoid residual files occupy memory capacity, please delete the files by computers, or format the memory card by the device. Please refer to **Format** (4.2).
- 4. If user only deletes rear camera files with on computer, then the device can only review the front camera files which hasn't been deleted.
- 5. The micro USB cable will not supply the power to the device, please power on the device and make sure it has enough battery power, or take out the memory card to read the files.

5.2 Connecting to TV

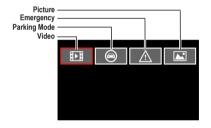
You can use HDMI cable transfer to TV to play the file.

- 1. Power on the device.
- 2. Connect HDMI cable to device HDMI
- 3. Connect HDMI cable to TV HDMI port.



 Power on TV, switch TV signal input HDMI, TV screen will show below icons, please operate by device





- It only indicates this device can connect to TV, HDMI cable is not included in standard package.
- Please make sure the device power is on before using HDMI cable connecting to TV.

6 Installing the Software

- 1. Place the attached CD ROM into the CD player.
- If the CD does not execute automatically, please use Windows File Manager to execute the Install_CD.exe file in the CD.

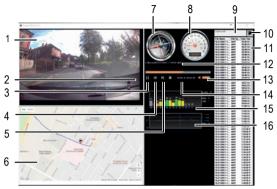
The following screen will be shown



3. Press the [Menu] item to start the installation process according to the instructions on-screen.

Visit www.snooperneo.co.uk for the latest version of the Snooper Player and user guide.

7. Snooper Player



No.	Item	
1	Video Player	
2	Play / Pause	
3	Previous	
4	Next	
5	Stop	
6	Google Maps	
7	Compass	
8	Speed Meter	

No.	Item	
9	File Path	
10	Browser File	
11	File List	
12	File Name	
13	Volume	
14	Playback Duration / Total Duration	
15	Signal Noise Ratio (SNR)	
16	G-Sensor	

- To display the route on Google Maps, please make sure the internet is connected before starting the video playback.
- Video files of front camera (MOV) and GPS/G-Sensor files (NMEA) must be stored in the same folder before starting the playback.
- 3. The Snooper DVR software is only applicable to Windows operating system.

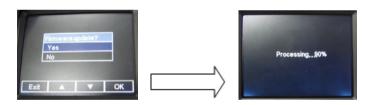
8 Updating speed trap data

Updating the speed trap data is simple.

Register your DVR5-HD at http://www.snooperneo.co.uk once registered, follow the on screen instructions.

For subsequent downloads please follow the instructions below:

- Log in to http://www.snooperneo.co.uk/dvr5.cfm and enter your serial number.
- Select the speed trap data you wish to download by clicking the link, when prompted save the file to your PC.
- 3. Remove MicroSD from the DVR-5HD and insert into your PC.
- Please unzip the firmware and put ***.BIN to the MicroSD card. Insert the updated MicroSD card into the DVR-5HD
- 5. Power on the DVR-5HD to update.



The device will automatically restart and delete the .BIN file from the SD card.

The update is now complete.

9 Specifications

Item	Description	
Jan- 2- 0- 2- 2- 2	Front Camera	1/3" CMOS sensor
Image Sensor	Rear Camera	1/2.7" CMOS sensor
Effective Pixels	Front Camera	2688 (H) x 1520 (V)
Effective Pixels	Rear Camera	1920 (H) x 1080 (V)
Storage Media	Support SDHC class 10 and 16GB microSD card (up to 32GB)	
LCD Display	3.0" TFT	LCD color screen
Lana	Front Camera	Wide Angle Fixed Focus lens F1.8, f=2.94mm
Lens	Rear Camera	Wide Angle Fixed Focus lens F2.0, f=3.8mm
Farm Danna	Front Camera	1.5m~Infinity
Focus Range	Rear Camera	1.5m~Infinity
Satellite System	GPS	
Movie Clip	Front Camera	Resolution: 2K HD@30 (1440P 30fps) / FHD@60 (1080P 60fps) / FHD HDR (1080P HDR 30fps) / FHD@30 (1080P 30fps) / HD@120 (720P 120fps) Format: MOV
	Rear Camera	Resolution: FHD@30 (1080P 30fps) Format: MOV

Item	Description	
Still Image	Resolution: 4M (2688 x 1520) Format: JPEG	
Shutter	Electronic shutter Auto: 1/33, 120~1/30 sec.	
G-Sensor	3-Axis G-Force sensor	
ISO	Auto	
White Balance	Auto	
Microphone	Yes	
Speaker	Yes	
Interface	Mini USB; Micro USB; Mini D Type HDMI	
Battery	Built-in 470mAh Li-polymer rechargeable	
Operating Temperature	0° ~ 60° C	
Operating Humidity	20 ~ 70% RH	
Storage Temperature	-20° ~ 70° C	
Dimensions	89 x 28.5 x 53 mm	
Weight Approx. 86g (without memory card)		

10 Service Under Warranty

Faulty Products up to 30 days from purchase.

Refund or Replace Policy, Contact Seller directly for this. The consumer is responsible to ensure software is up to date. All products must be complete with accessories and original packaging on return.

Faulty Products from 31 days to 12 months from purchase.

Snooper (Performance Products Ltd) will offer a prompt repair service. In all cases we reserve the right to inspect the product and verify the fault. Contact Seller for their returns procedure, all warranty claims MUST go through the seller. Consumer is responsible for software updates!

We do not cover faults caused by accident, neglect, misuse or normal wear and tear. All products must be complete with accessories and original packaging on return.

For further detail please visit:

http://www.snooperneo.co.uk/Returns.cfm

Enclose the following information:

- (a) Your name, address and a full description of the problem.
- (b) Telephone number where you can be reached during business hours.
- (c) Serial number of your unit.
- (d) Proof of Purchase

PLEASE NOTE: We cannot process any warranty claims unless proof of purchase is provided. Please retain your receipt as a precaution. Full terms and conditions of warranty are available on request.

Limited Warranty

This Snooper product is warranted against all defects in materials and workmanship for a period of one (1) year from the date of original purchase, when purchased from an authorized Snooper dealer.

ALL PURCHASES OF SNOOPER PRODUCTS FROM NON-AUTHORIZED SNOOPER DEALERS ARE SUBJECT TO FURTHER WARRANTY RESTRICTIONS AS DESCRIBED OVERLEAF.

The conditions of this Limited Warranty and the extent of responsibility of Performance Products Ltd (PPL) under this Limited Warranty are as follows:

- This Limited Warranty will become void if service is performed by anyone other than an approved Snooper Warranty Service Centre that results in damage to the product.
- 2. This Limited Warranty does not apply to any product which has been subject to misuse, neglect or accident, or which has had the serial number altered, defaced or removed, or which has been connected, installed, adjusted or repaired, other than in accordance with the instructions provided by Snooper.
- 3. Should you have any difficulties with the performance of this product during the warranty period, please call Snooper or visit our web site http://www. snooperneo. co.uk. You may also contact Snooper Customer Services at the address listed below for any service help you may need with Snooper products.
- 4. PROOF OF DATE OF PURCHASE FROM AN AUTHORIZED SNOOPER DEALER WILL BE REQUIRED FOR ANY WARRANTY SERVICE OF THIS PRODUCT
- 5. SNOOPER PRODUCTS PURCHASED FROM A SOURCE OTHER THAN AN AUTHORIZED SNOOPER DEALER, INCLUDING ANY AND ALL PURCHASES VIA THE INTERNET FROM A NON INTERNET AUTHORIZED SNOOPER DEALER, SHALL NOT BE COVERED BY ANY SNOOPER LIMITED WARRANTY TO THE EXTENT ALLOWED BY APPLICABLE LAW.

- THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM EU COUNTRY TO EU COUNTRY.
- 7. ALL IMPLIED WARRANTIES, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, SHALL HAVE NO GREATER DURATION THAN THE WARRANTY PERIOD SET FORTH ABOVE. UNDER NO CIRCUMSTANCES SHALL SNOOPER BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT. BECAUSE SOME EU COUNTRIES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.
- Product must be shipped in its original carton or equivalent carton, fully insured, with shipping charges prepaid. Snooper will not assume any responsibility for any loss or damage incurred in shipping.
- 9. The sole responsibility of Snooper under this Limited Warranty shall be limited to the repair of the product or the replacement of the product only (whichever is deemed appropriate and at the sole discretion of Snooper).
- 10. This Limited Warranty does not cover car static or other electrical interferences, labour costs or any other associated or incidental costs incurred for the removal or reinstallation of the unit for repair.



DVR-5HD





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