

# recNEO FULL HD

## Vehicle Video Recorder

### User Manual

---



2013 Oct V1.0

---



# Safety Precautions

Record and review some test footage to ensure the device records correctly.

Please note that the manufacturer, its subsidiaries, affiliates and distributors are not liable for damages arising from any malfunction of the main device accessories, including the memory card, that fails recording footage in a way that is not machine-readable.

Before using the product, please read the safety precautions outlined below. Always make sure the product is used appropriately.

- Use only recommended power supplies.
- Do not attempt to disassemble, alter or apply heat to the product.
- DO NOT apply multi cigarette lighter adapters – doing so will cause unstable power input that damages the device.
- Please always make sure all power connectors are fully secured.
- Avoid dropping or subjecting the product to severe impacts.
- To avoid the risk of injury, do not touch the interior of the product if it has been dropped or otherwise damaged.
- Stop using the product immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.
- Do not use organic solvents such as alcohol, benzene, or thinner to clean the product.
- Do not let the product come into contact with water (e.g. sea water) or other liquids.
- Do not allow liquids or foreign objects to enter the VVR.
- Do not place the VVR near or in direct flame.
- Do not handle the power cord with wet hands.
- Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories.
- Do not use if the power cord or plug are damaged, or not fully plugged into the outlet.
- Do not allow dirt or metal objects (such as pins or keys) to contact the terminals or plug.
- Avoid using, placing or storing the product in the humid or dusty areas.

---

# Index

A. Feature Description .....	1
B. Specification .....	2
C. Accessories .....	2
D. Installation.....	3
E. Control Panel/Function Board.....	5
F. SD Card Installation.....	6
G. Function Panel.....	7
H. OSD Menu function .....	9
I. VACRON Viewer Player .....	10
J. Record Time Estimation .....	19
K. Appendix: The Indication of Bright and Dark Spot of LCD.....	20

## **A. Feature Description**

- Real-time recording in Full HD (H.264 compression technology).
- 105° Wide-angle CMOS Lens.
- 2.5" TFT LCD.
- GPS sensor.
- Record video and sound inside and outside the car.
- Compatible with SDHC Card up to 32GB.
- Continuous recording.
- Emergency recording - footage recorded with overwrite protection.
- Featuring a Gyroscopic sensor that automatically activates emergency recording in case of an accident.
- Made in Taiwan with a 3-year warrantee.

## B. Specification

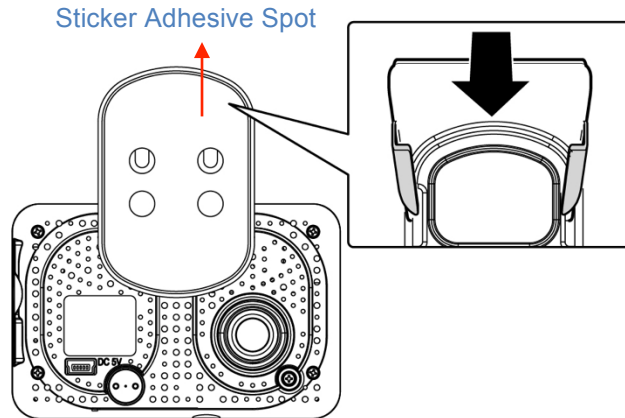
Item	Description
Sensor	CMOS
View Angle	105° Wide-angle
Resolution	Full-HD NTSC 1080P/30 fps ; PAL 1080P/25 fps
V / A	DC5V±5% / 1A
Operating tmp.	-10° ~ +60°
Display	2.5" TFT LCD
Storage	4GB SDHC Card or above (Recommend 『SanDisk』 Class 10 or above)
Recording	Auto recording 30 seconds after power on. Footages will be preserved after power off.
Recording content	Date/Time/Image/Sound/G-Sensor data)
Storage Format	Special format, playing on LCD screen. Or specific Player bundled.
Audio Input	Built-in microphone
Time setting	Built-in permanent calendar with adjustable function through remote control or bundled Player. ※CR1220 Battery can be replaced by users.
G-Sensor	Built-in 3D G-Sensor

## C. Accessories

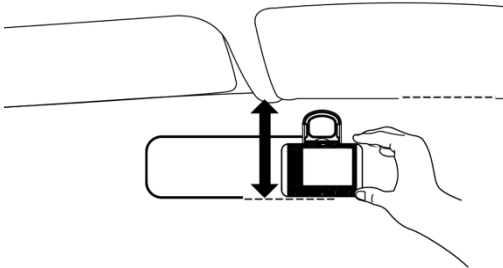
Adapter / Software CD / Bracket / Quick Start Guide / 8G Class10  
SDHC Card

## D. Installation.

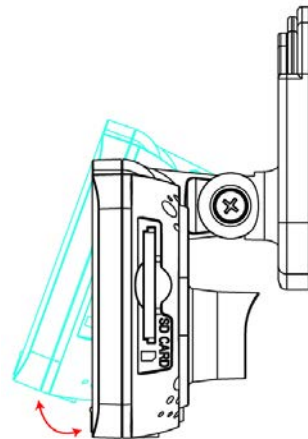
1. Install the device on the windshield with 3M or suction cup mount



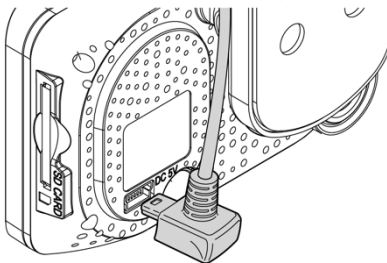
2. The best position to install the device on the windshield



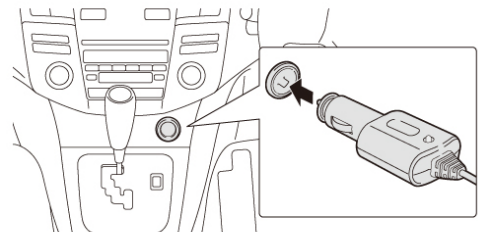
3. To adjust the recording angle properly



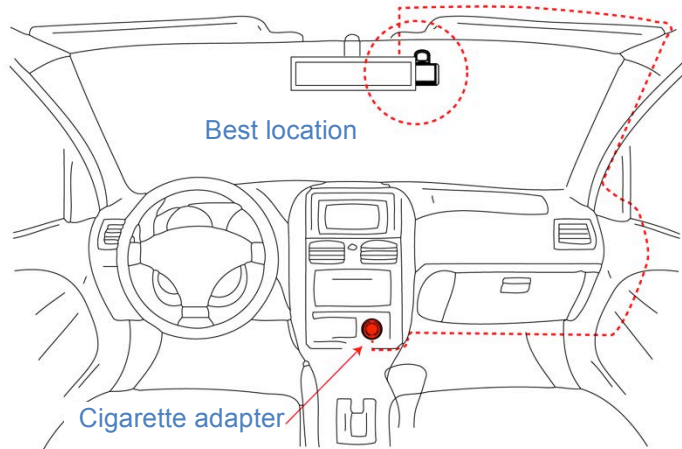
4. Plug in DC5V Power Supply



5. Plug in the Cigarette Charger



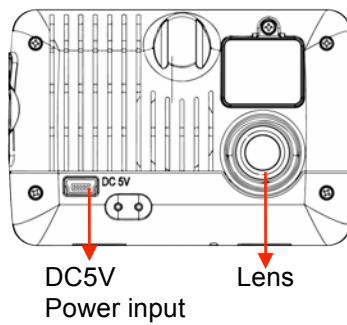
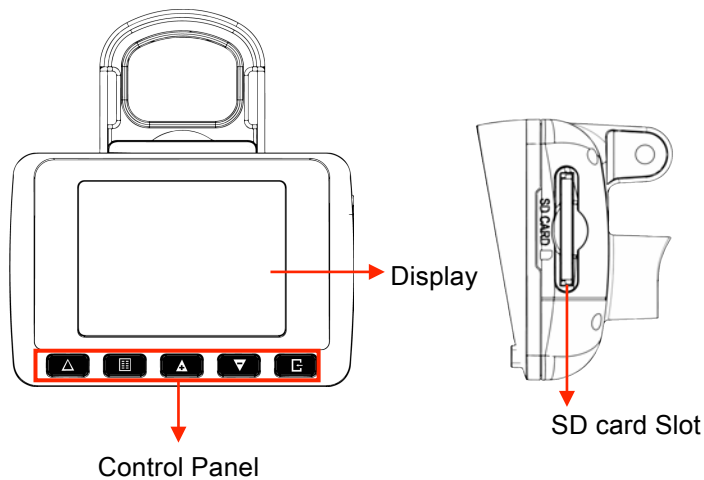
## 6. VVR installation



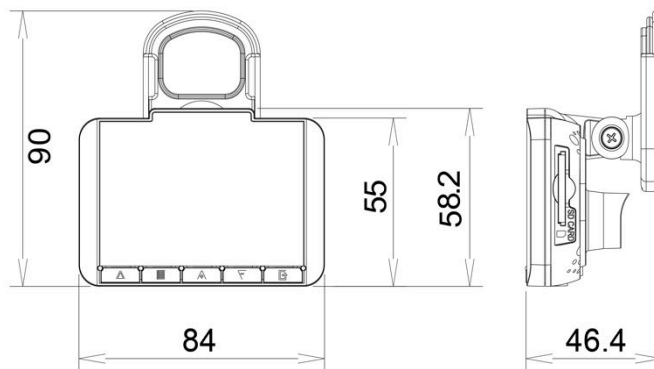
### Caution

- (1). This device should be installed in the area where the windshield will be able to be cleaned.
- (2). Formatting SD card on the device before beginning to use.
- (3). Set time zone and timing on OSD.
- (4). NTSC or PAL setting through OSD.

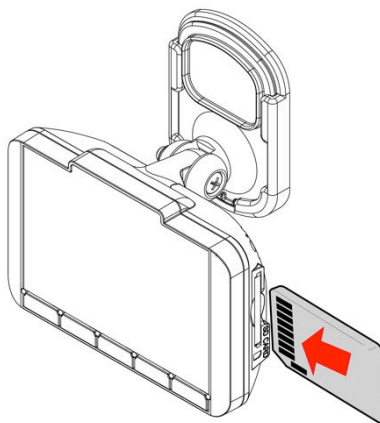
## E. Control Panel/Function Board



Dimension (mm)



## F. SD Card Installation



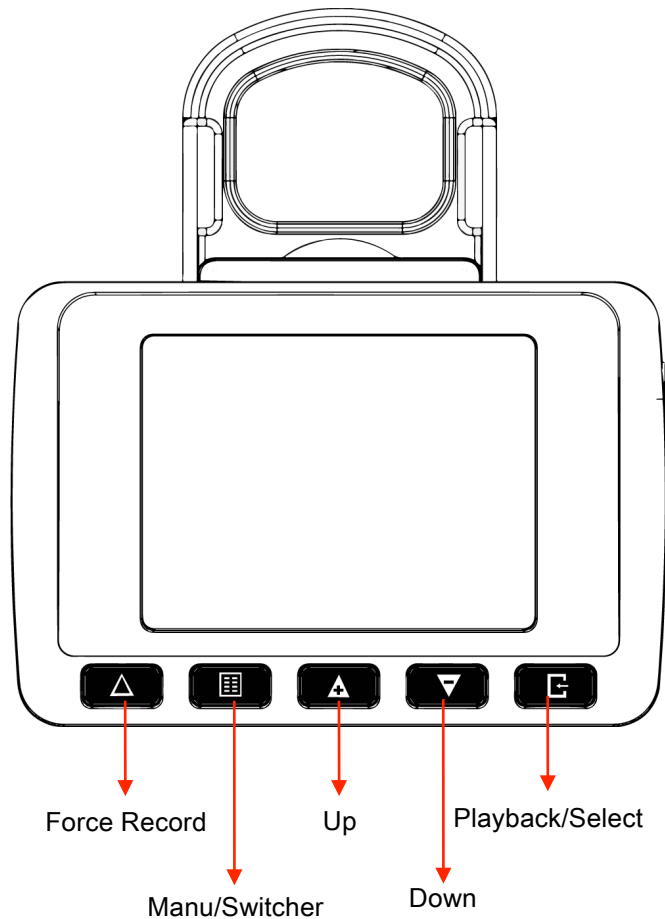
- (1). Format memory card; please refer to the other chapter “Formatting memory card” for more detail.



### Caution

- (1). Recommend Memory Card “SanDisk” Class 10 or above. (Minimum of 4GB)
- (2). If the memory card is not formatted by our exclusive player, the device will automatically erase all the data inside of the memory card after inserting it, start recording at default setting.
- (3). Please don't convert Micro SD to SD card to begin recording, to avoid the damage during recording.
- (4). Since memory cards have the writing endurance situation, we recommend to inspect the memory card and use pc for playback regularly, to ensure that the memory card can read and write

## G. Function Panel



- To press force record any time under operation will trigger force recording.
- LED indicators
  - Red: Under normal operation-recording
  - Fast Blinking Red: Force recording
  - Green : Low light indicator

## Recording / Stop Recording

### 1. **Power On/Recording**

When car power on, the device start up automatically. Please wait for 30 Sec. to start recording.

### 2. **Power Off/Stop recording**

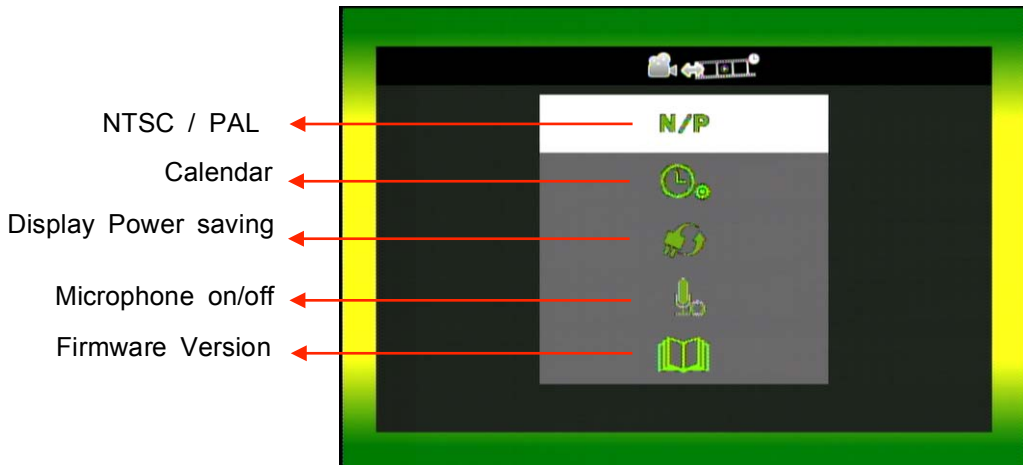
When the car power off, the device will stop to record video and sound. You can take off the memory card and insert to computer to view the video.






### 3. **Indication**

Red light Blinking when recording. (Emergency recording blinking fast)

## H. OSD Menu function

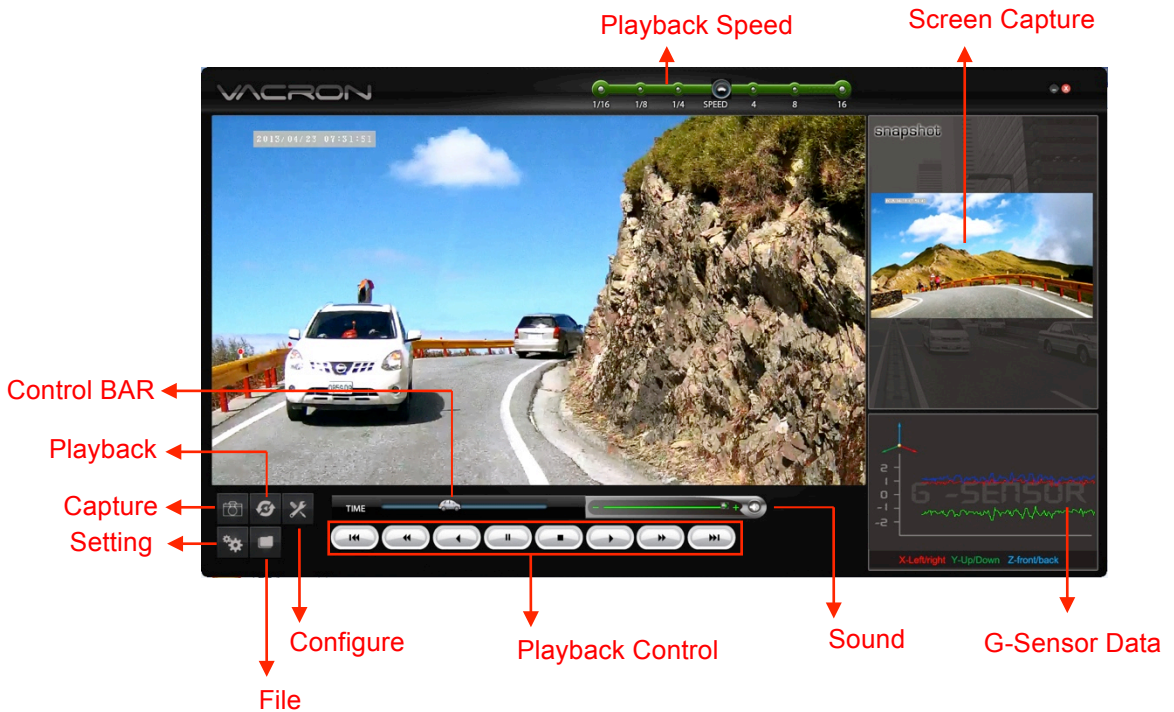
In Live view screen press  will popup OSD operation menu as follows:











1. Select  to export NTSC or PAL signals
2. Select  to set built-in clock.
3. Select  to set power saving on display
4. Select  to set microphone on/off
5. Select  to view the current firmware version

## I. recNEO Full HD Player


□ DirectX 9.0 or above is required.

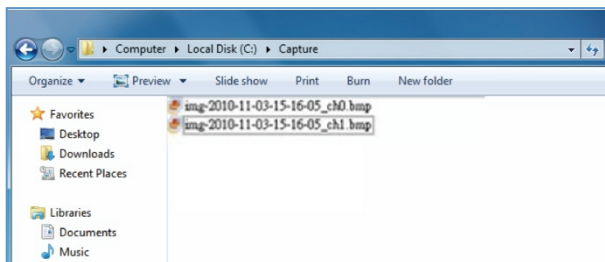


### 1. Operation icon introduction

	Back to previous file
	Previous image
	Reward
	Pause
	Stop
	Play
	Next image
	Next footage

## 2. Capture: Capture the current screen image

You can capture the image when play the footage, click  button the capture the image, The following windows will shows, the image you captured is showing on the right side. File saving cdirectory are in /Snapshot folder, and the file type is \*.bmp.

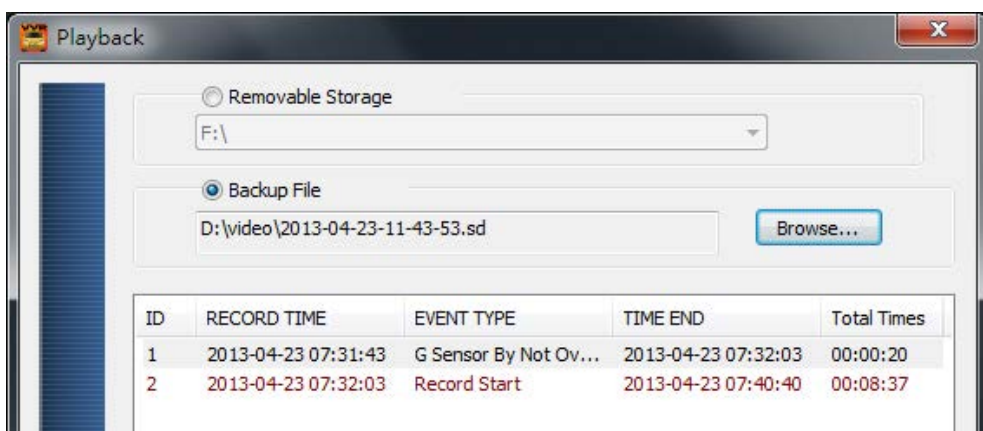


( Select File )

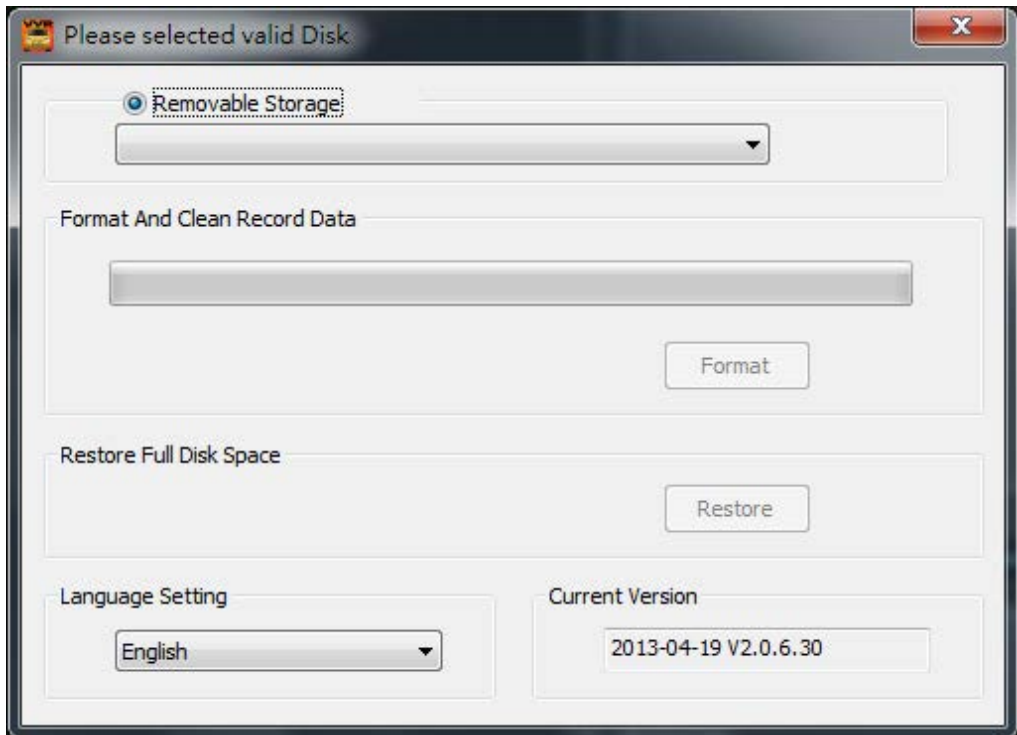


(SNAPSHOT show)

## 3. Play back: Open file



#### 4. Format: Format memory card/Langue setting



### Caution

- (1). 「Format / Restore」 will clean all the data saved on SD card, Please back up the data before 「Format / Restore」.
- (2). Before 「Format / Restore」 SD memory card, please ensure to unlock it first.
- (3). If the card is unlocked but still cannot be formatted, this might be caused by Window Vista / 7 security restrictions. Please run the program as Administrator to prevent from this problem.

a. 「Format」 SD card

While applying a brand new SD card, formatting is required.

b. 「Restore」 SD card

When you have backup the recorded files into PC and want to use the SDHC card for other purposes, you have to restore it first so it can be used correctly.

c. Language setting

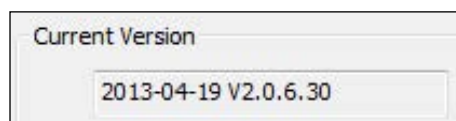
Select the designated the display language.

\* Note: New language setting will start after rebooting.



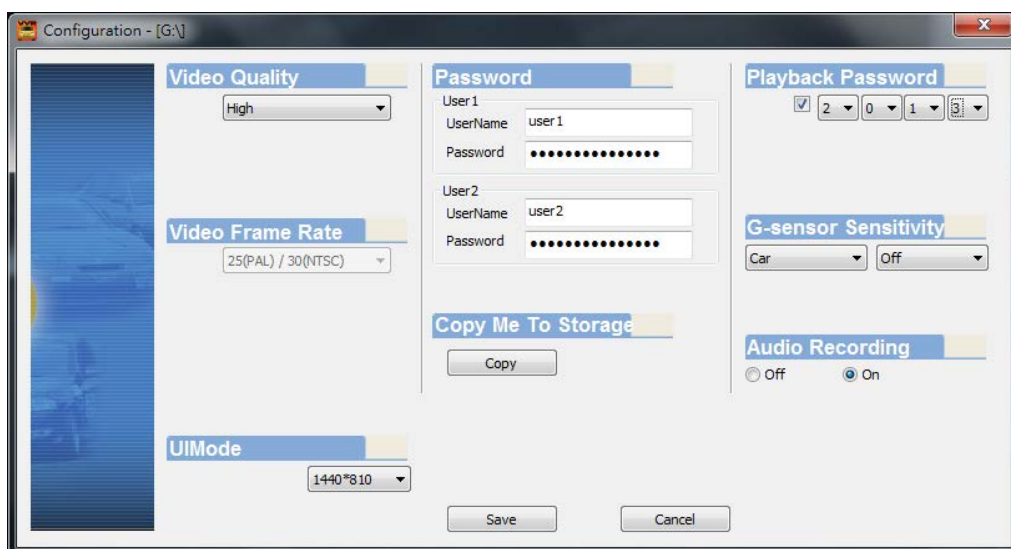
d. Current Version

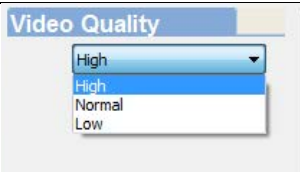
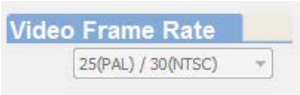
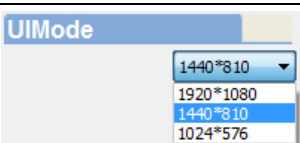
Version Support VACRON web site <http://www.road-eyes.com/en/support>




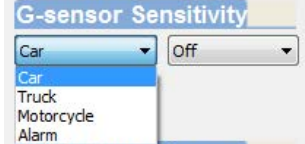



## 5. Configuration: configure default setting

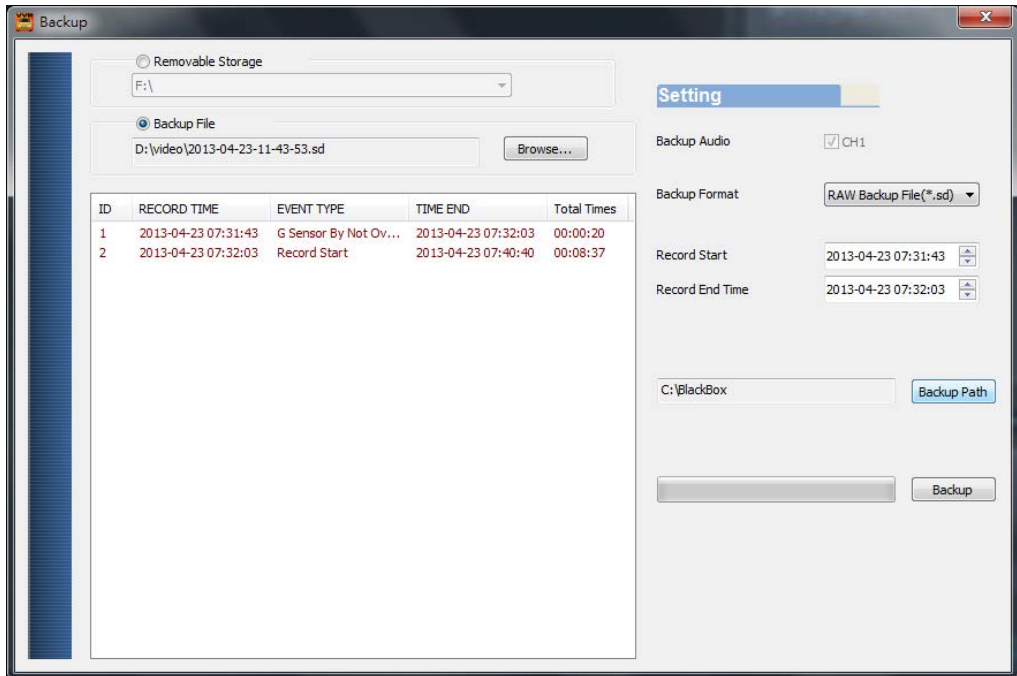
Put the SD Card into Card reader and plug-in the card reader into the USB slot of your PC to format the SD card before the first time to record. Then also need to configure video type and display way, When finish the setting, insert the SD card the vehicle video recorder to start recording.



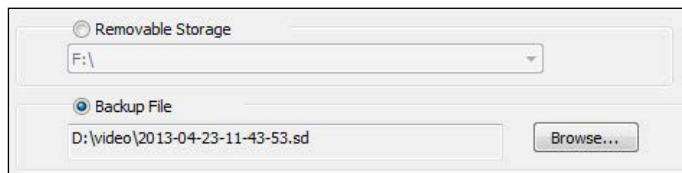
1	Image quality		The default quality is high / Normal / Low
2	fps setting		25(PAL) / 30(NTSC)
3	UI Mode		The resolution can be adjusted.

4	Password		<p>This function can encrypt the SD card to prevent illegal retrieving from others, the password is under 15 character, for example:123456789123456</p> <p>You will need input password when you playback/configuration/format SD card if you set a password.</p> <p><input type="checkbox"/>Note: Upper/lower character is different; remember the password is very important.</p>
5	Copy the player to SD card		Copy the player to SD card.
6	Password in LCD playing		You can set the password, when playback on the device LCD, you need to unlock the password.
7	G-sensor sensitivity		Vehicle type and G-Sensor's sensitivity can be adjusted.
8	Audio recording		Audio recording on/off

## 6. File backup: click to choose file save directory.



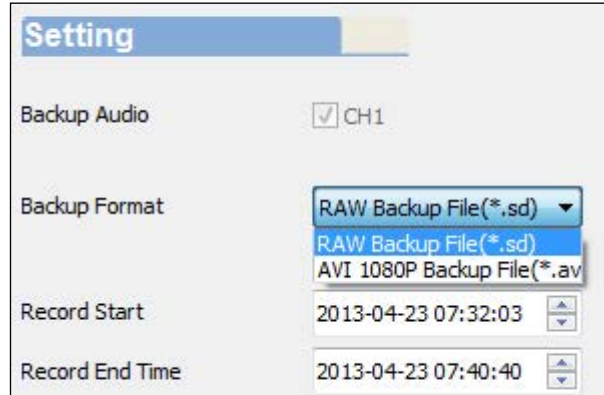
Step1. Choose the source of the memory card.



Step2. Choose the designated footage to backup.

ID	RECORD TIME	EVENT TYPE	TIME END	Total Times
1	2013-04-23 07:31:43	G Sensor By Not Ov...	2013-04-23 07:32:03	00:00:20
2	2013-04-23 07:32:03	Record Start	2013-04-23 07:40:40	00:08:37

Step3. Choose the target file format and start/end record time.



**Setting**

Backup Audio ☒ CH1


Backup Format   
 RAW Backup File(\*.sd)   
 RAW Backup File(\*.sd)   
 AVI 1080P Backup File(\*.av)

Record Start 2013-04-23 07:32:03


Record End Time 2013-04-23 07:40:40

### File format

(1) Our original file format

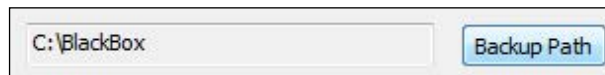
 <div> 2013-06-06-09-49-33.sd  SD File  104 MB </div>	*.sd format
--	-------------

(2)AVI File Backup(\*.avi)

 <div> 2013-06-06-09-50-56-CHN01  00:00:30  55.2 MB </div>	AVI format
--	------------

☐ Note: G-sensor data can only be displayed on manufacturer's player.

Step 4. Set the backup folder: default is C:\BlackBox



C:\BlackBox Backup Path

Step 5. Start to backup



Backup

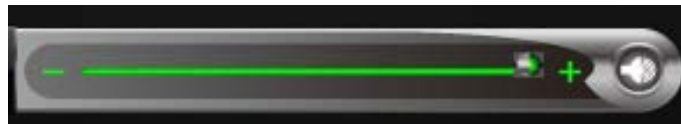
7. Play BAR: You can use Mouse to drag the car icon to move footage location



8. Play speed: 4X、 8X、 16X and quick playback, 1/4X、 1/8X、 1/16X and slow playback.



9. Volume control: Click +、 - to adjust volume.



10. G-SENSOR

G-Sensor will detect the impact form the car, and record 1-3 minutes footage automatically. This footage will save to separate area to avoid file from being overwritten.



- (1) **X**: Detect vehicle horizontal change.
- (2) **Y**: Detect vehicle vertical change.
- (3) **Z**: Detect vehicle front/back change.

## J. Record Time Estimation

The chart below is for reference only. The length of time recorded can be varied due to variation in image size may be different.

Capacity Video Quality	8G	16G	32G
High	120 Min	240 Min	480 Min

## Appendix: The Indication of Bright and Dark Spot of LCD

Q: What is Bright/Dark Spot?

- A :
- Bright Spot: At dark background, we found the abnormal bright spots, we called those spot are “Bright Spot”
  - Dark Spot: At multiple color background (excluded dark background), we found the abnormal dark spot, we called those spot are “Dark Spot”

Q: The indication of Bright and Dark Spot

- (a) There is no bright spot allowed in Area A, only single dark spot or none is allowed.
- (b) The maximum amount of bright spots and dark spots allowed in Area B are two of each.
- (c) The max total amount of bright and dark spots in Area A and B are three or under

1/4	1/2	1/4	
B	B	B	1/4
B	A	B	1/2
B	B	B	1/4

The Diagram of Area A and B



### Caution

- (1). There is 30 days exchanges refer to the indication of bright and dark.
- (2). Please keep the receipt and contact your local dealer for exchanging merchandise.
- (3). The maximum valid date is 30 days.



---

For More Information  
Please check the RoadEyesCams Website  
<http://www.road-eyes.com>

---

Made in Taiwan