Full HD

Vehicle Video Recorder

User Manual

2019 JULY V1.0

Safety Precautions

Please Take and review some testing videos initially to make sure the images were recorded correctly.

Please note that manufacturer, its subsidiaries and affiliates, and its distributors are not liable for consequential damages arising from any malfunction of main device accessory, including memory device that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

Before using the product, please ensure that you read the safety precautions described below. Always ensure that the product is used correctly.

- Use only recommended power sources.
- Do not attempt to disassemble, alter or apply heat to the product.
- DO not apply multi cigarette lighter adapters-Applying such devices will cause unstable power input to damage the vehicle video recorder.
- 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.

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A. ACCESSORIES

Please review the contents prior to use. Please contact your local dealer if something not found in the box.

※ Storage card is not included in the box as free provision.

■ Standard

Cigarette Lighter Adapter
Bracket
Monitor Mount (3M double sided tape included)
Quick User Guide
16GB SMART CARD
CD Rom

■ Optional

SD Card USB Reader
IR Remote Controller

B. FEATURE DESCRIPTION

- FullHD 1080P, H.264, real-time recording.
- 120° wide-angle 5MP sensor.
- 2.5" TFT LCD.
- Share of performance as the entire SD card.
- Records video and audio of a car around.
- SDHC Card in Use, Class 10 or above 8GB at least, max to 128GB.
- Loop recording / on start recording.
- Manual Record Events Not Overwritten.
- G-Sensor Built in Crash Event Saved Securely.
- Build-in super-capacitor to offer extra 3-second recording after car stopping supplying power and ensure the video is well stored.
- Zoom IN/OUT by mouse wheel on Carbox player.
- Enhanced night view capacity to offer clear image even when under low-light environment.

C. SPECIFICATIONS

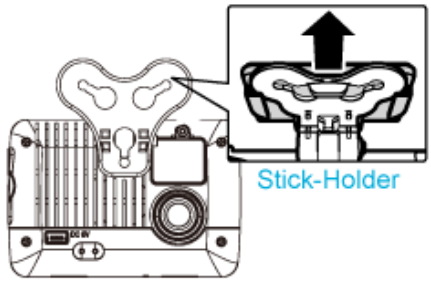
Item	Description
Sensor	SONY CMOS Sensor
Resolution	FullHD 1080p Resolution NTSC 1080P 30FPS / PAL 1080P 25FPS
Power Supply	DC5V±5% / 1 Amp. Build-in 1.5F super-capacitor.
Operating Tmp.	-10℃~ +60℃
Storage	SDHC Card Recommended Class 10 or above 8GB at least, max to 128GB.
Recording	Start recording automatically when power up, extensional 3 seconds recording after power off.
Recording Data	Date/Time/Video/Audio/G-Sensor
Playback	Playing on LCD screen. Or Playback the video files on PC.
Audio Input	Built-in microphone
Time setting	Time Setup by OSD Menu.
G-Sensor	Built-in 3D G-Sensor

Notification	1. Startup Menu and OSD (on screen display) might be varied with firmware update. 2. Please refer to the SD card usage and life limit, and check video recording periodically with Carbox player on PC to ensure normal recording. 3. Please replace build-in battery CR1220 for clock memory when time is not calibrated.

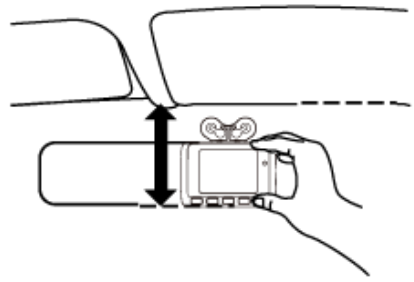
※Specifications shall be changed subject to necessary update.

D. INSTALLATION

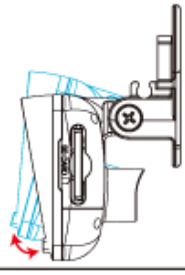
1. Install the device on the windshield by "Stick-Holder" type



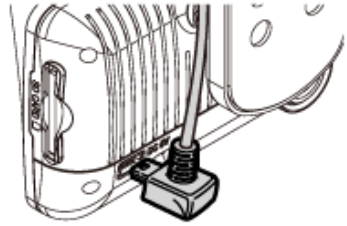
2. Find the optimal position of device on the windshield.



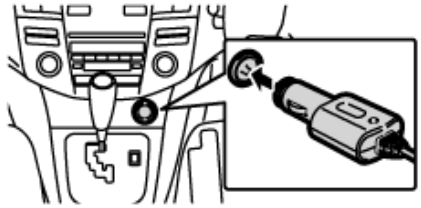
3. Adjust the view angle properly.



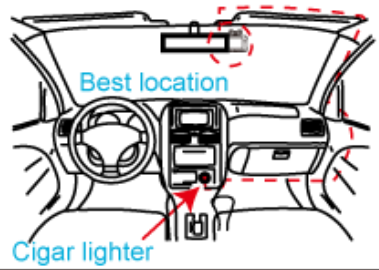
4. Plug in the DC5V Power Supply.



5. Plug in the Cigarette charger.



6. VVR Installation.



Notice

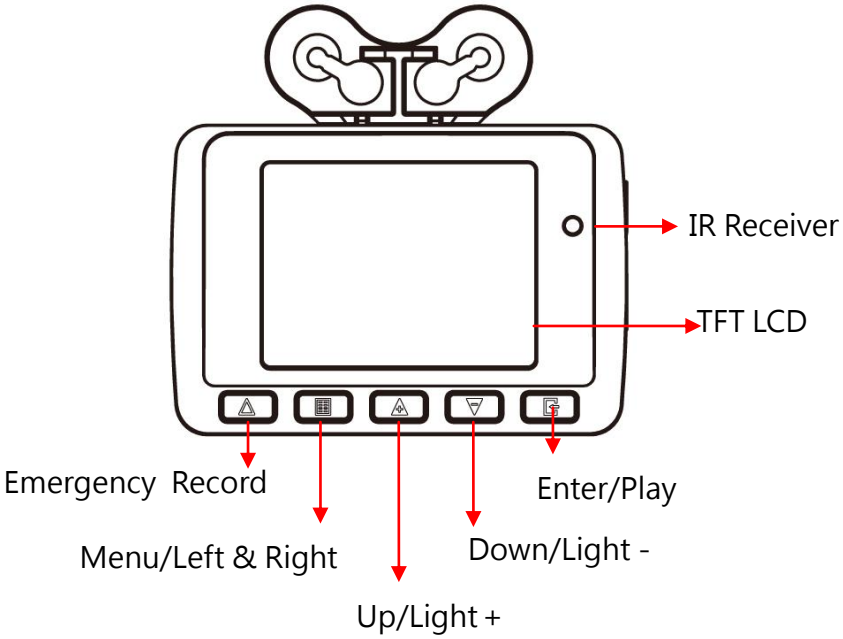
(a) This device should be installed on the windshield of clean and dry.

(b) The best location must be in the range of the moving wipes.

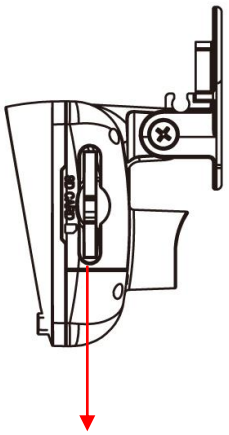
(c) Format the memory card in the DVR prior the very first recording.

(d) Set time zone and timing on OSD.

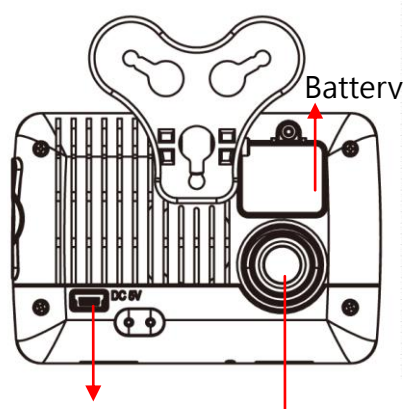
E. CONTROL PANEL / FUNCTION BOARD



- Emergency Record is a priority button. Whenever Emergency Record occurs record status comes up to the screen.
- LED indicators
  Red: Under normal operation-recording
  Fast Blinking Red: Force recording
  Green：Low light indicator



SD Card Slot

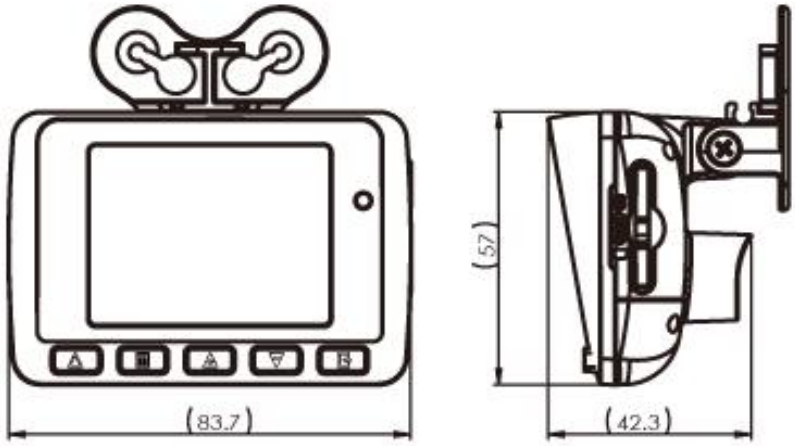


DC5V Power In

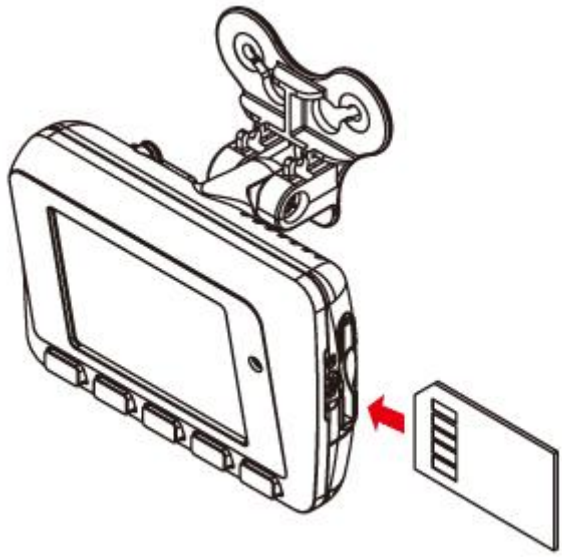
Lens

Size of VVR

unit : mm



F. SD CARD INSTALLATION



Warning

(1). Recommended Class 10 or above 8GB at least, up to 128GB.

(2). If the memory card is not formatted by the player, the device will automatically erase all the data.

(3). Please DO NOT use micro SD card adaptor. The adaptor could cause recording stability.

(4). Memory card has its limit on written times. It is suggested to check SD card files with PC player Carbox player periodically.

(5). When the SD card life monitor index is less than 5%, the red light of the device will flash for 10 seconds, and the warning notice will be displayed for 10 seconds on screen. After 10 seconds, it will return to the normal status. When the SD card life monitor index is 0%, the light of the device keeps flashing, and the screen displays the warning notice continuously.

(6). The SD card may be not compatible to the device due to changes or adjustments in the manufacturing' s process. This device cannot guarantee compatibility with all SD cards which are available in the markets. If there is a possible SD card compatibility problem, please replace the model or brand of SD card.

(7). In the event of impact and high vibration, it may cause damage to the SD card. It is recommended to check and back up important data regularly.

(8). When an accident happens, please remove the memory card from the device immediately and set it at writing protection condition to avoid record being over written or tampering.

G. RECORD AND STOP

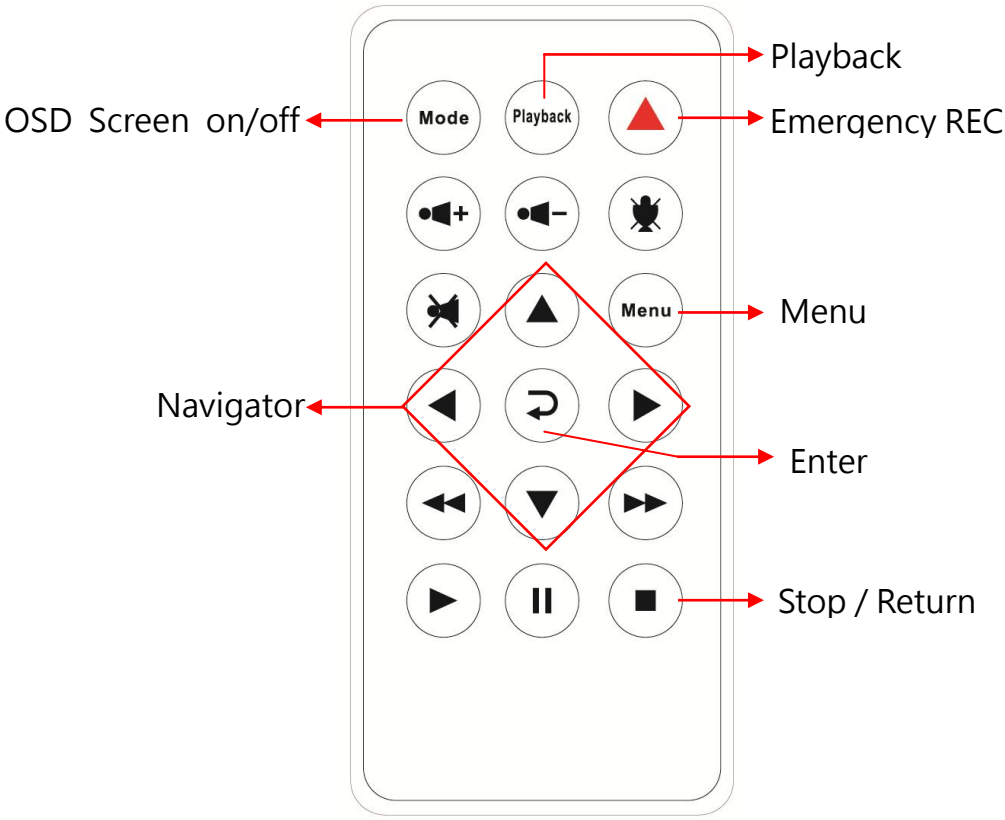
1. **Reboot/Record**

   Reboot the DVR system ready in 20 seconds. DVR starts recording.

2. **Power Off/Stop**

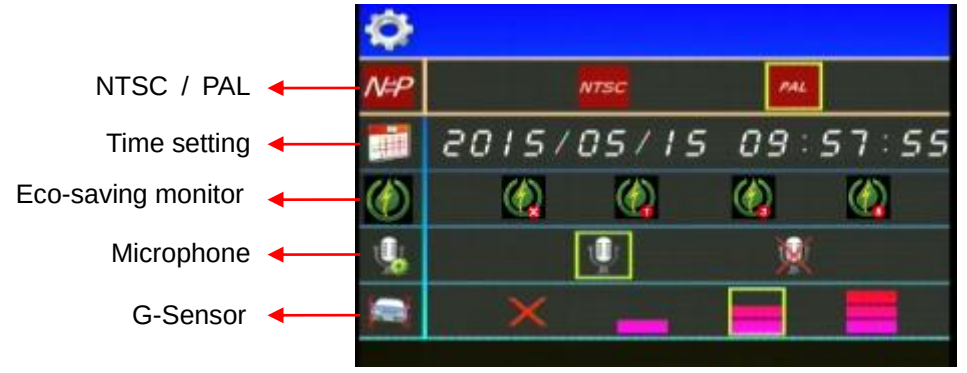
   It stops recording once power is off, build-in capacitor offer 3 seconds extra power to make sure file is well stored. User can remove the memory card after the indication light is off.

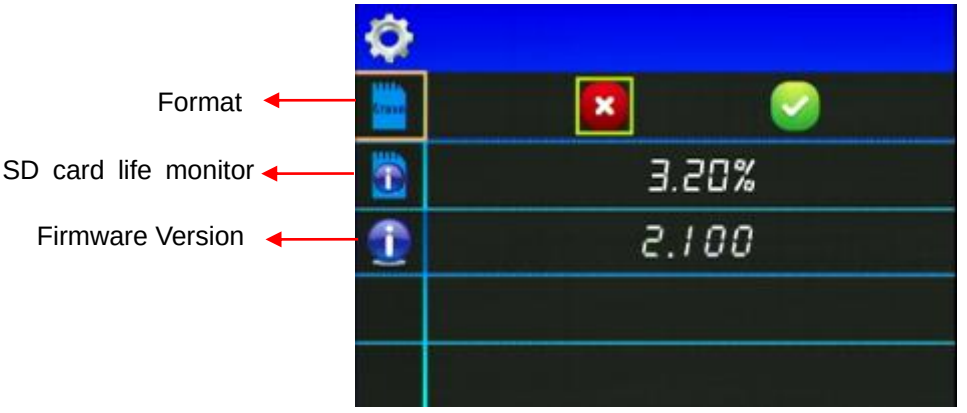
H. REMOTE CONTROL (optional)



I. OSD MENU FUNCTION

Select Menu enter OSD as below





1. Video standard: click to set NTSC or PAL.
2. Time setting: click to set calendar.
3. Monitor setting: click to set Eco-saving mode.
4. Microphone: click to set microphone on or off.
5. G-sensor: click to adjust the sensitivity of G-sensor.
6. Format: click to format memory card.

7. SD card life monitor : to show current life of SD card.
8. Version: click to show current firmware version information.

J. PLAYBACK

Click the playback function to enter playback menu, and choose the recorded video fragment.

1. : Manual/Emergency Recording.
2. : G-Sensor Recording.

K. PC VIEWER

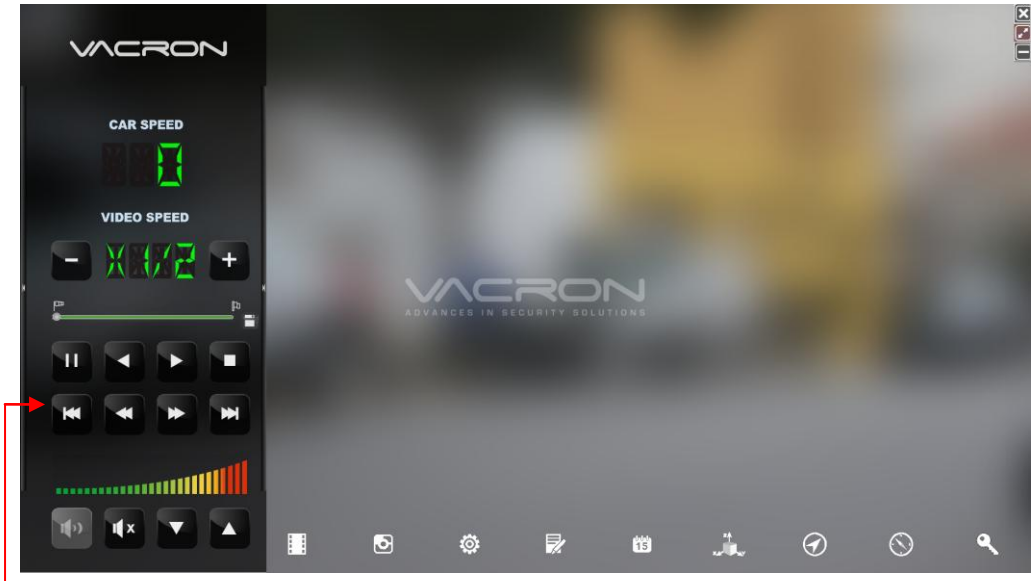
★Reminder-

(1). To do this, the software should be installed DirectX 9.0 or above.

(2). Support OS: WINDOWS 7,8,10, does not support MAC OS.

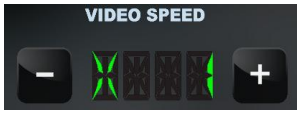
(3). The recommended hardware requirements: i5 above grade 3.1GHZ,

RAM: 4G or more, more preferably independent display card.

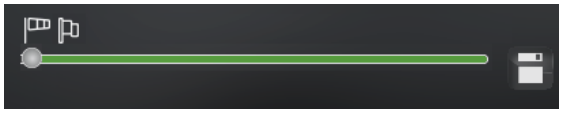


Allow to move the user interface to left or right.

1. Playback Speed: Fast Forward 2X, 4X, 8X; Slow Forward 1/2X, 1/4X, 1/8X



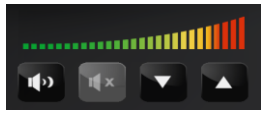
2. Scroll Bar: playback display can be scrolled to wanted position. Set the start and end point to identify the range, right click to backup the video files.



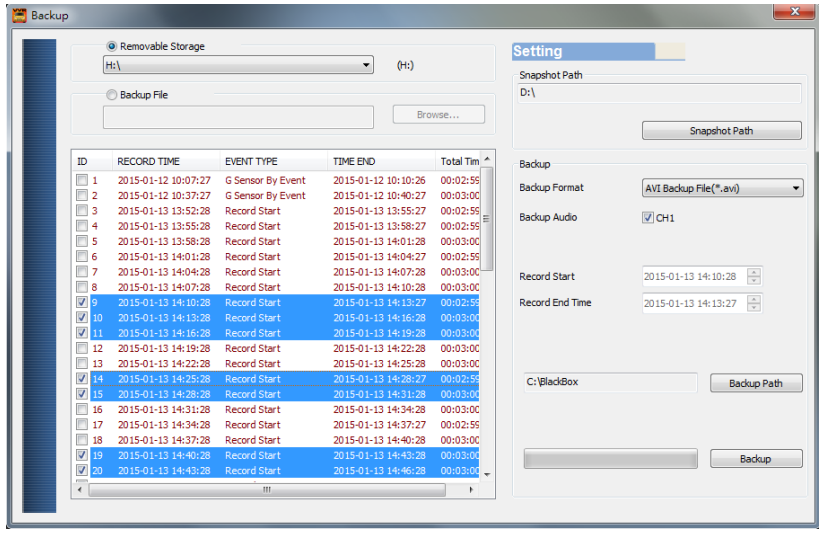
3. Control Panel

	Pause
	Reverse
	Play
	Stop
	Previous File
	Previous Frame
	Next Frame
	Next File

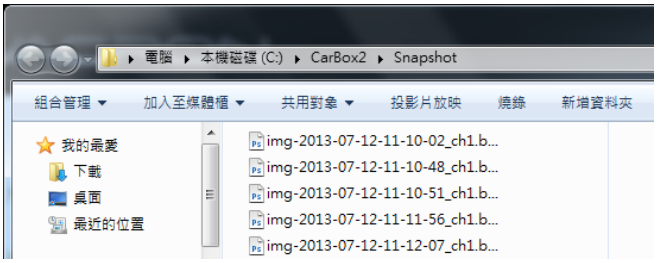
4. Volume control: Click + 、- to adjust volume.



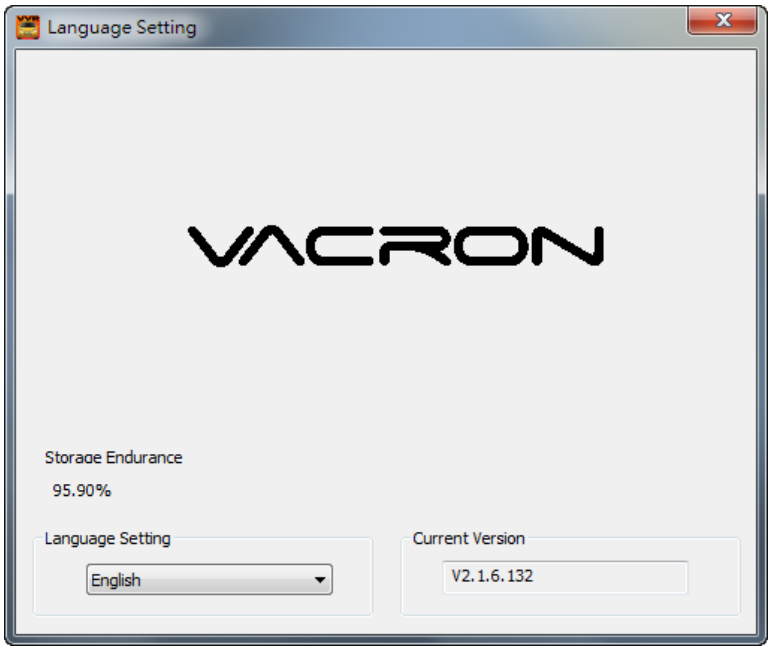
5. File backup: click to choose file save directory.

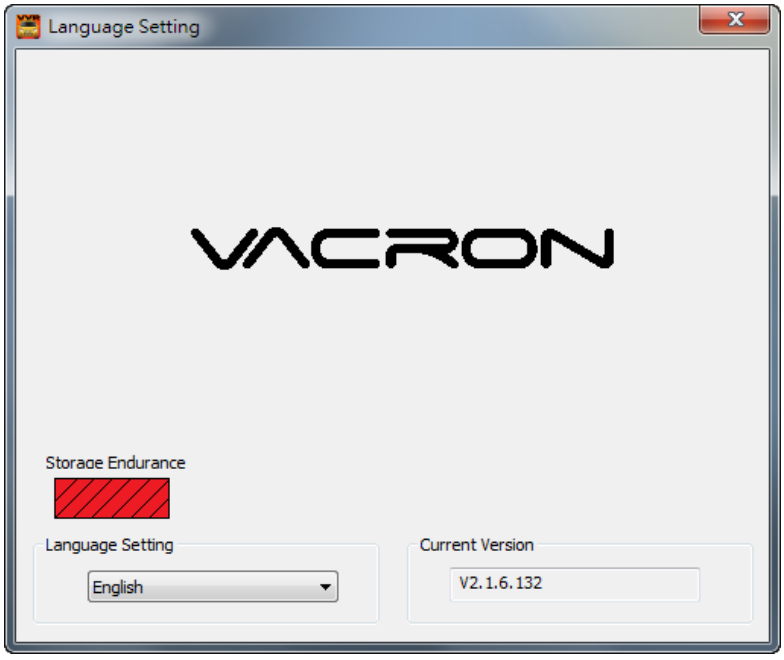


6. Snap Shot: to capture the picture during playback, and click to save the file to directory (default directory: /Snaptshot, the saving directory can be changed. The file format is ".bmp")

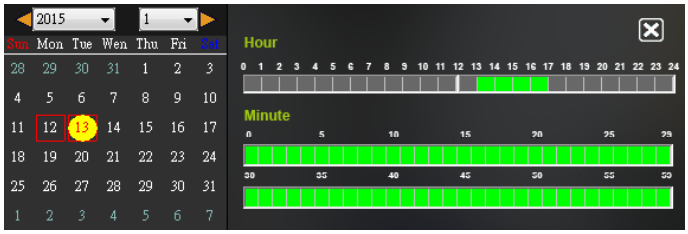


7. Current Version:
   (a) click to view current version and setting language.
   (b) **SD card life monitor: w**hen the SD card life monitor index is less than 5%, the red light of the device will flash. In this status, the recording still works properly. Be attention to the SD card may need to be replaced immediately, so as not to cause the video to be abnormal.


Language Setting
VACRON
Storage Endurance
95.90%
Language Setting
English
Current Version
V2.1.6.132

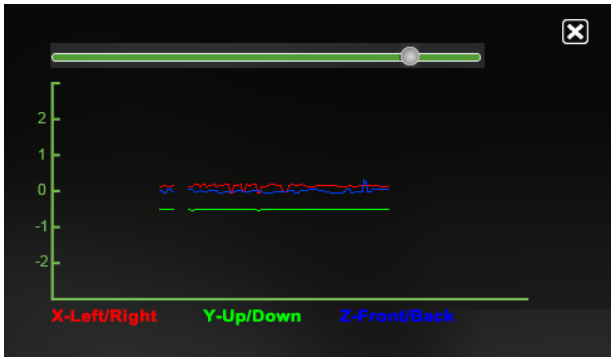

Language Setting
VACRON
Storage Endurance
Language Setting
English
Current Version
V2.1.6.132

8. Playback List: to access video recording and jump to required segment by scrolling time bar.



9. G-SENSOR

G-Sensor will detect the impacts form the car, and record 1-3 minutes video automatically. This footage saves to the 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.

L. RECORD TIME ESTIMATION

The chart below is for reference only. The length of recording time can be varied due to variation in image size and video quality.

Capacity / Quality	8GB	16GB	32GB
High	120 Minutes	240 Minutes	480 Minutes

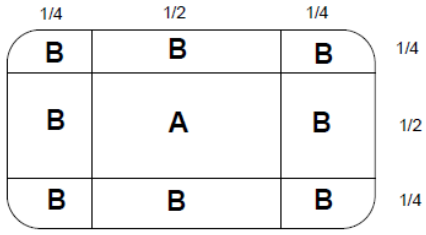
M. CRITERIA OF TFT LCD INSPECTION

Q: What is bright spot? What is 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, those spots are "Dark Spots"

Q:Criteria of bright spot

(a) No bright spot in zone A and only one dark spot here.
(b) 2 bright spots is OK in zone B same standard to dark spot.
(c) Totally 3 Bright spot plus dark spot is OK in zone A+B.



Zone A and Zone B

Precautions

(1). 30 days return policy against Criteria of TFT LCD Inspection.
(2). You can get the replacement from your local dealer within 30 days from the receipt date.
(3). Only 30 days validity and RMA not included.
(4). Light emitting components are weaker time by time. Changes on brightness, color and ghost image are in tolerance range.