

2CH Mobile Video Recorder

User Manual



2016 AUG V1.0



※The memory card dose not includes, please buy it separately.

Health and Safety Information And Usage Guidelines

Dear Customer,

We appreciate your purchase, if you meet any problem during the usage, please contact retailer immediately. The important, we remain the right to change and improve our product without any notices.

Read all following instruction carefully before set up and use :

System Installation Cautions

- Before install system, get knowledge of charge and power cable wiring. °
- The system must installed by technicians of professional vehicle manufacturers or professional vehicle installation service.
- Place the device in a well-ventilated location inside a vehicle
- Please select the storage device following the storage device manufacturers advice, in order to meet a long time, a large amount of data read and write requirements. For ensure the storage devices quality, please purchase from the official channel.
- If you meet any problem during the installation, please contact technicians of dealer or authorized vendor immediately.

Vehicle System Cautions

- Do not let any solid or liquid seep inside the device.
- Do not disassemble this equipment, repair or replacement any component. If the machine does not work properly, please contact the manufacturers or dealer, we will solve problems as soon as possible.
- For avoiding battery leakage damage, Please remove battery from remote control when you are not plan to use remote control recently.
- Please install ground first to avoid static / lightning might broke the recorder.

Usage environment cautions

- Please place and use this product under the recommended temperature, avoid direct sunlight, or near heat sources.
- Do not install the machine in moist environments.
- Do not expose the machine in smoky, dusty environment
- Do not drop the machine for avoiding strong collision
- Please install this product in ventilated locations, do not block the product's vents.
- Please use this device within the rated input and output range of current and voltage.
- This device is design for electronic engineering prolonged use; do not place the device next to flammable or explosive materials. In order to avoid safety problems.

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A. Accessories

Before you use our product, please make sure everything that we list below is included in this package. Contact retailers if this package is missing any item.

✂ The memory card is sold separately

■ Standard package includes:

1. Camera *2
2. 2.5M Power cable *2
3. Charge cable
4. USB WIFI dongle
5. Velcro tape

■ Optional

8/16/32G SD memory card, Class10 or above.

B. Key Features

1. Miniature video recording system with 2-way video input, which suitable for vehicle.
2. H.264 video compression screen without distortion.
3. Vehicle charger, Low power consumption and excellent heat radiation. Lithium battery is not used to eliminate risks of overheating and “explosion”.
4. Turn on the engine, automatic start loop recording; Turn off the engine, saving the data and shutdown the video recording automatically.
5. Built-in gold capacitor. If the machine turns off, the video recording will be automatic delay, which is ensure that the data saving into the memory card.
6. The external USB WiFi dongle is available for immediate viewing and backup file on your mobile device.
7. Made in Taiwan.

C. Specifications

● DVR Specification

Items	Description
Video input	2 Channel, support similar 2 channel cameras
Frame Size	NTSC: 30 fps (D1); PAL: 25 fps (D1)
Voltage and Current	DC12V, 250mA (When the old capacitor is charging, Host voltage and current are about 500mA)
Power supply	(a) ACC ON power offer by 12V vehicle battery (b) ACC OFF delay about 30 seconds shut down the main power (c) ACC OFF Standby current 5mA or less (d) Built-in gold capacitor, after the main power shut down, it can be delayed for 3 seconds to save the file for the host.
Operating Temperature	-15°C~ 50°C
Storage	Recommend to use SDHD card, 4G or above, class 10 or better.
Recording	Automatically starts continuous recording when powered on
Recording Content	Date, time, video, audio
Storage format	Specific file format, need to play with a dedicated play software
Time setup	Automatic calibration by GPS signals. If GPS signal is unavailable, internal clock will be used.
Input and output device	(a) Red light: Flashing indicates the video is recording (when G-sensor active, the red light flicker higher frequency). (b) Green light : Light always on is indicated power on. (c) DC12V power input. (d) Image input aperture (1 Vp-p composite video output, 75 ohms), video input has to distinguish between PAL or NTSC system.

	(e) USB 2.0 Input aperture(can select the optional wireless network card connection to WiFi wireless Internet)
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Note: Product specifications are subject to change without any notice.

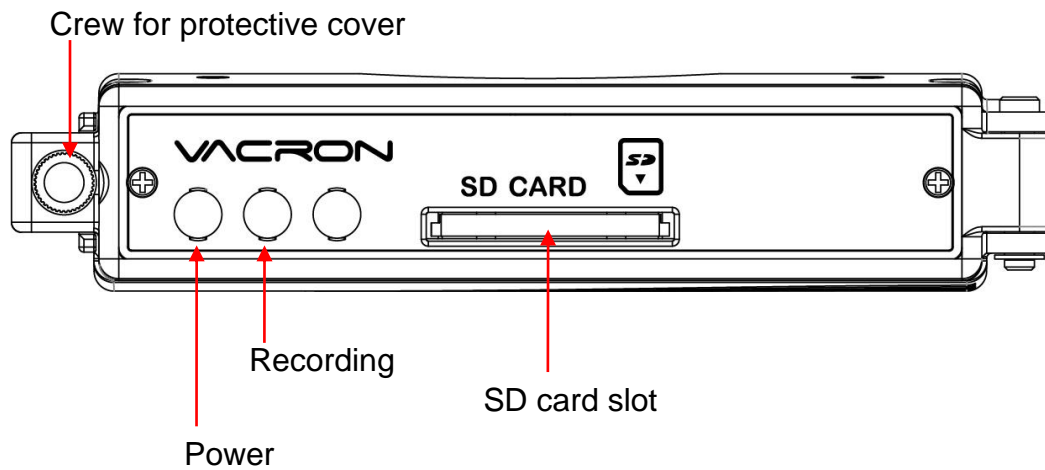
● Camera Specification

Power	Input voltageDC5V~DC12V \pm 10% ; Current consumption about 500mA
Image resolution	NTSC/PAL
	Highest at 30FPS
CMOS	1/4 inch CMOS
Camera angle	horizontal angle 110°/ vertical angle 55°/ diagonal angle 130°
Camera lens	2.0mm (optional)
Temperature range	Operating temperature : -20°C ~ 60°C (Non-confined space with naturally cooling environment)
	Preservation temperature : -40°C ~ 85°C
Output terminal	Micro Din
Size	30x43x50mm

Note: Product specifications are subject to change without any notice.

D. Product Description

- Vehicle device



E. Memory Disk



- (1). Loosen the screw in counterclockwise rotation, and open the protective cover to insert/remove SD card.
- (2). Please refer to the other sections for format / restore the memory card.

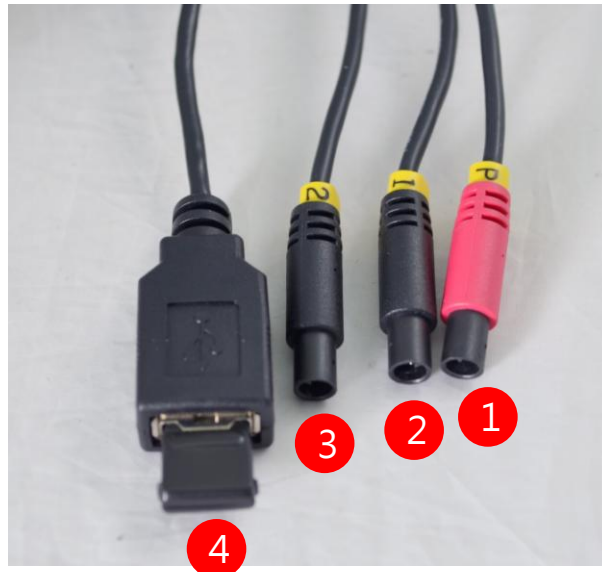


CAUTION

- (1) Recommend using SDHC Card, Class 10 above (8G or better)
- (2) Before using the memory disk, please format the disk first using the software player in the CD-ROM. If not, device will automatically erase all data in the memory disk before recording.
- (3) To ensure recording quality, please do not use adapter card with Micro SD card. Doing so may lead to bad connection due to shock and vibration.
- (4) All memory disks have limited lifespan. Please regularly watch videos on PC and check the memory disk to ensure proper functioning
- (5) Strongly recommend regular inspection and backup important data. The shock and vibration can cause physically damaged to memory disk, resulting in choppy playback or data damage.

F. Cables Installation Instructions

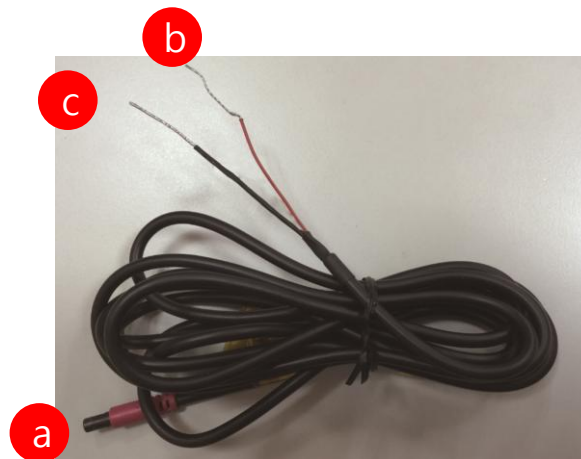
Cables



- (1) Power connector
- (2) Channel 1 Video Input
- (3) Channel 2 Video Input
- (4) WiFi Dongle connector

NOTE: Use this device with compatible vehicle cameras

● Power Cable



- (1). Power Adapter - Female connector.
- (2). Live Wire (red): Wire to the positive pole of Engine Starter. (+)
- (3). Earth Wire (Black): Wire to Negative Pole. (-)

G. Vehicle Installation

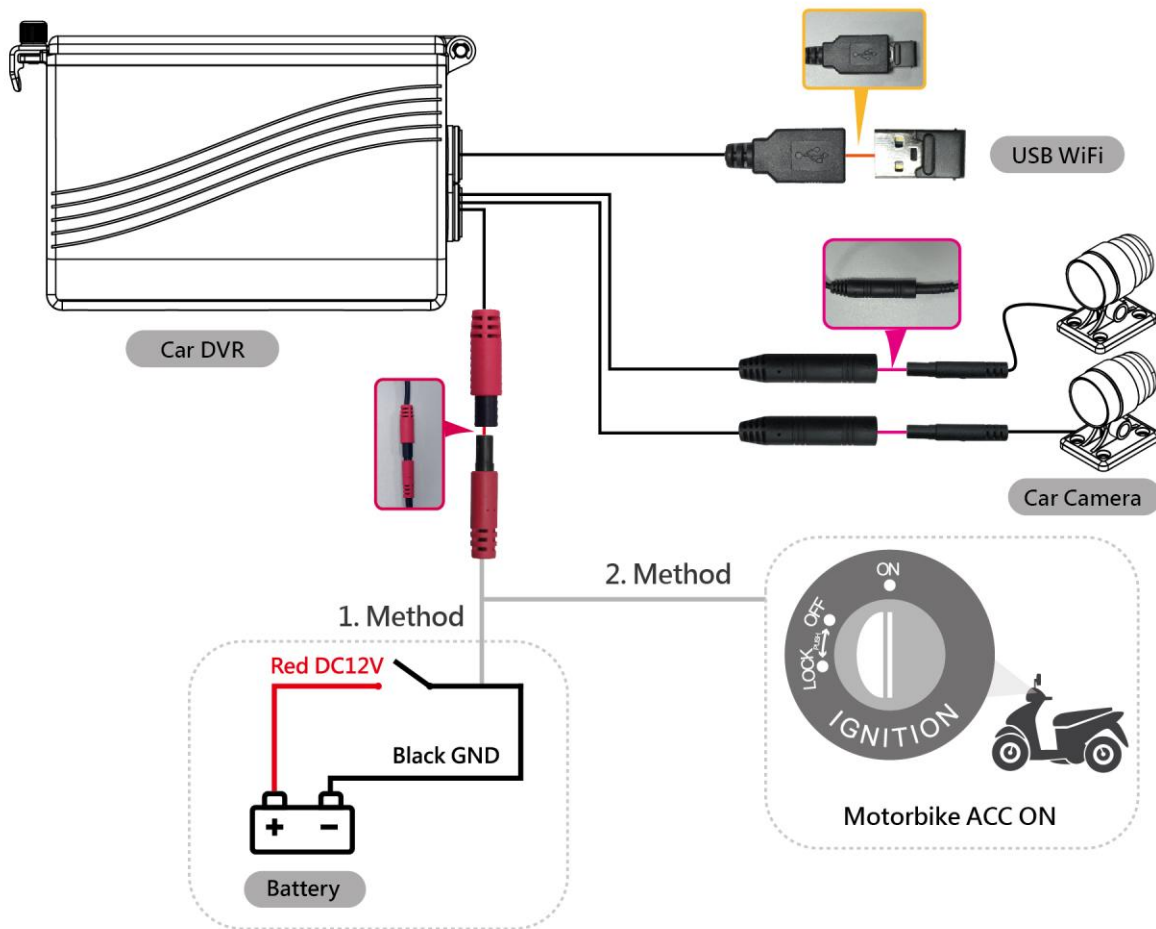
Example Installation



CAUTION

- (a) For installation by none-technician, please use tapes instead of boring tools to avoid damaging the electrical and gasoline system °
- (b) Recommended using hose covered wire at high temperatures and engine wiring portion for extend device lifespan.
- (c) For safety, switch off ignition before installation, and please keep away from gasoline pipeline and tank. °
- (d) For avoiding vibration that resulting in poor contacting problem to video adapter, do not recording video by the SD card transferred by microSD.
- (e) Before inserting wires through holes, temporarily wrap the terminal with tape to prevent bad connection from accumulated dirt or debris. Tightly seal all electrical connection with tape to prevent loose connection or leak leaking to the connection.
- (f) Connect the power behind the key ignition and fuse (not directly to the vehicle battery) to avoid depleting the battery.
- (g) Recommended to install the device into the trunk or less susceptible to external impact position. To reduce a direct damage to the device that causes data loss.

● DVR Installation Diagram



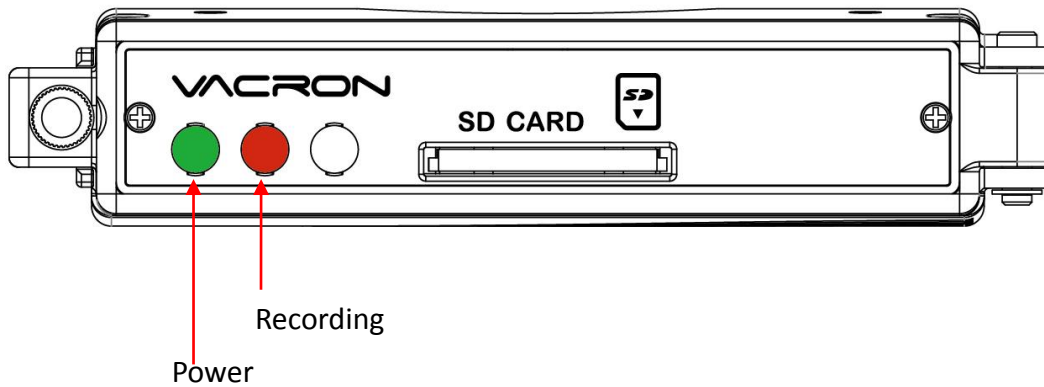
1. Method : Connect to battery, set up the switch.
Independent power supply

2.Method : Connect to Motorbike power supply (ACC ON),
when engine is on turn on automatically.

H. Recording

1. Power on/Recording:

Power On, and wait about 30 seconds later, the boot is complete. During the recorder boot process, The PWR Green light is always on. The red light flashing represents the beginning of recording.




Lights indicate:

- Power : **Green light** always on is indicating device power on.
- Recording : **Red light** flashing represents the beginning of recording.

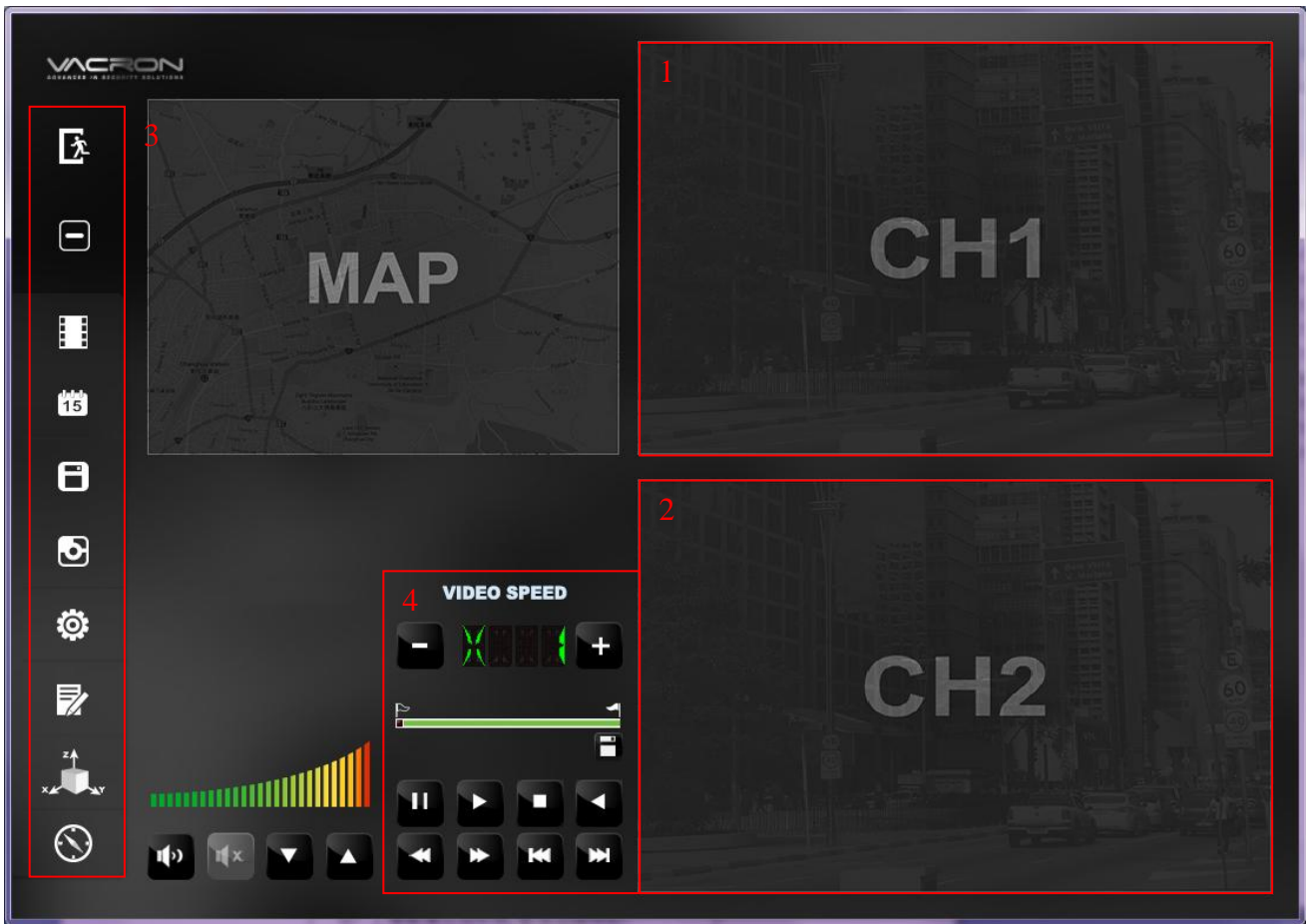
2. Power off/Stop recording

A delay of approximately 3 seconds after the power is turned off to stop recording, and then the system will write buffer zone back to the SD card. After the light goes out, you can remove the memory card reader of the video file.

I. Live Display on PC











Run the player software , the software display following :
NOTE: The software requires Direct X version 9.0 or above.

1. Viewer schematic diagram



1	Camera 1
2	Camera 2
3	Functions
4	Keyboard

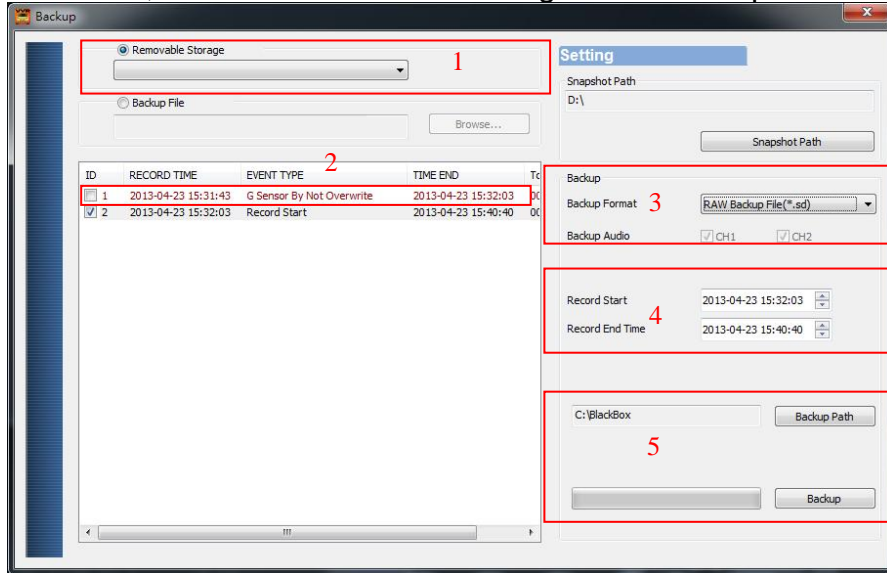
2. Function Description

	Shutdown
	Minimize window
	Open file, choose file to play
	Recoding date line
	Backup tool
	Screenshot tool
	Setting
	Reset tool
	G-sensor
	Not support on this model

J. File Backup

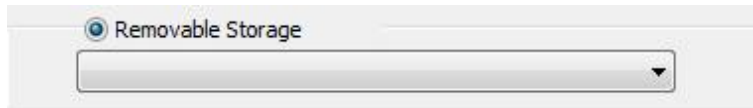
Upload files from SD card to PC.

On the player software, select  and the following window will open.



To backup video:

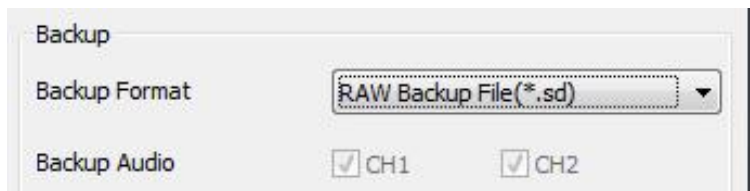
Step one. Select the path of the memory disk



Step two. Select the footage that you want to backup

ID	RECORD TIME	EVENT TYPE	TIME END	Tc
<input type="checkbox"/> 1	2013-04-23 15:31:43	G Sensor By Not Overwrite	2013-04-23 15:32:03	00
<input checked="" type="checkbox"/> 2	2013-04-23 15:32:03	Record Start	2013-04-23 15:40:40	00

Step three. Select the Backup Format:



Backup Format: :

(1) Raw file (RAW)

<input type="checkbox"/> 2014-05-27-18-10-03.sd	The file ending with *.sd
---	---------------------------

(2) AVI File (*.avi)

<input checked="" type="checkbox"/> 2014-05-27-18-11-07-Cam1.avi	Cam1 indicates Cam1 footage The file ending with*.avi
<input type="checkbox"/> 2014-05-27-18-11-07-Cam2.avi	Cam2 indicates Cam2 footage, The file ending with*.avi

Note : **Recommended backup file with RAW format.** The RAW backup format can save the original data that Backup all footage information (video, audio, G-SENSOR, speed and GPS data). However, the AVI format can backup video, time and audio data, the GPS and G-SENSOR data will loss. °


Step four. Select the backup beginning and ending time

Record Start	2013-04-23 15:32:03	▲▼
Record End Time	2013-04-23 15:40:40	▲▼

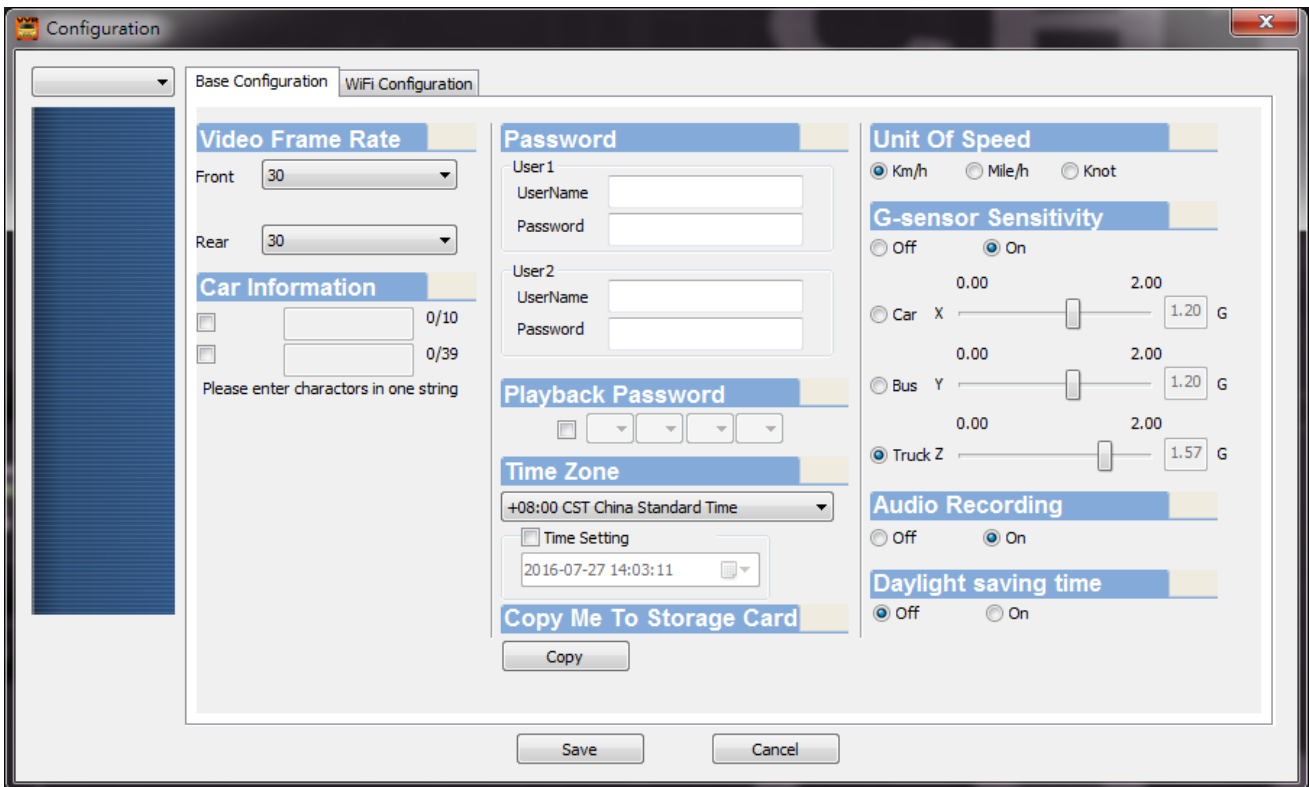
Step five. Select the destination folder of the file and Select Backup to start

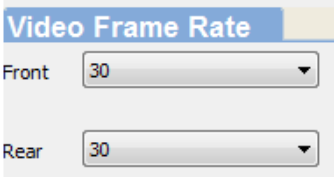
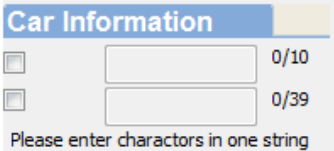
C:\BlackBox	Backup Path
	Backup

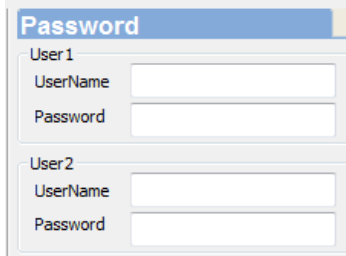
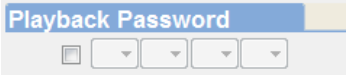
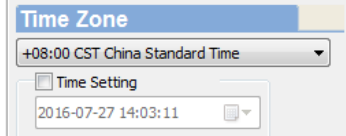

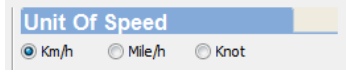
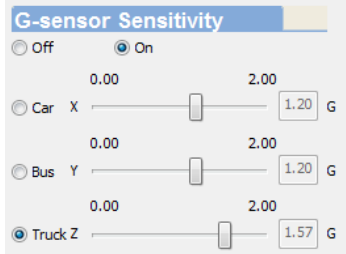
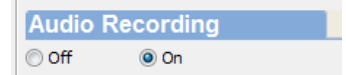
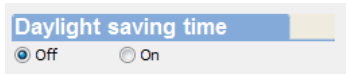
K. Configuring the Memory Disk

Before use please plug SD card into card reader, then plug card reader into PCs USB input slot, click the “CarBox2” icon on the screen, set up video format and display method, after done, plug SD card back into MDE16, it will automatic save changes .
 In PCs player, following will show up after click  :

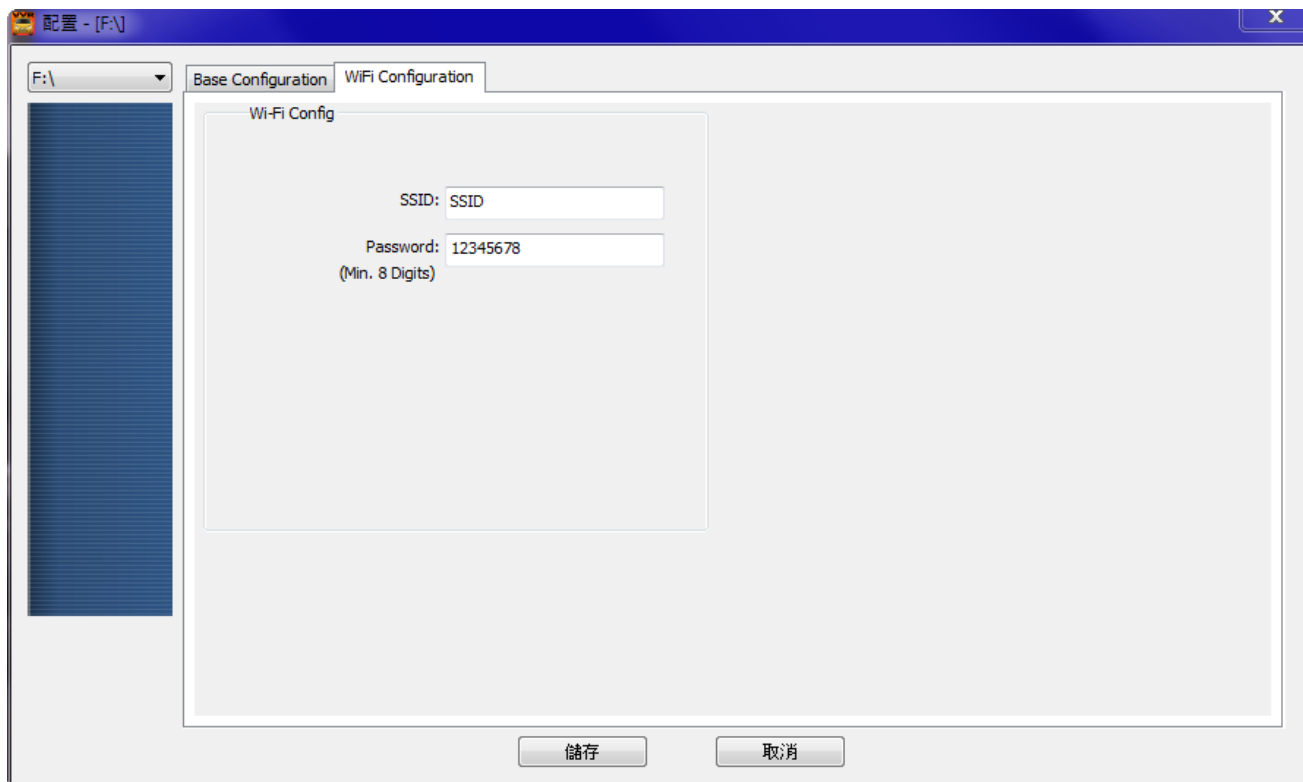
1. Base Configuration



1	Video Frame Rate		Set the number of frames per second., NTSC30 、 15 PAL 30 、 25 、 20 、 15 、 10 、 5
2	Car Information		Not support on this model

3	Password		<p>This function can encrypt the data and prevent unauthorized access. Maximum letters. Password can contain maximum 15 letters</p> <p>For example:123456789123456</p> <p>After passwords are setup, you will need to enter the password to access the disk (video playback, configuration, formatting, etc.)</p> <p>★NOTE: Password is case-sensitive. Always keep passwords in secure location.</p>
4	Playback Password		Not support on this model
5	Time zone		Not support on this model, can be changed by player
6	Copy me to storage		Copy and save Player to SD Card
7	Unit of Speed		Not support on this model
8	G-sensor Sensitivity		Not support on this model
9	Audio Recording		Not support on this model
10	Daylight Saving Time		Not support on this model

2. WiFi Configuration




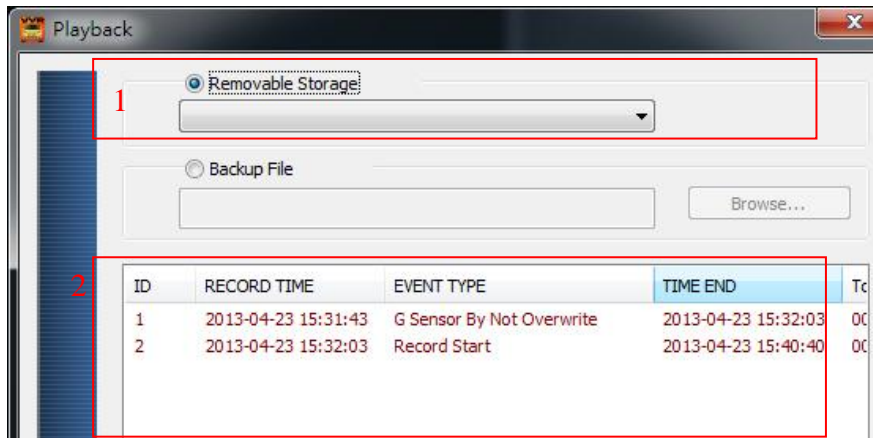
1. SSID and password preset on 「SSID」、「12345678」
2. SSID and password are replaceable (at least 8 words on password)

L. Video Playback

We offer video playback software on PC.


1. Playback on Computer


On the software player, select  and the following window will appear:

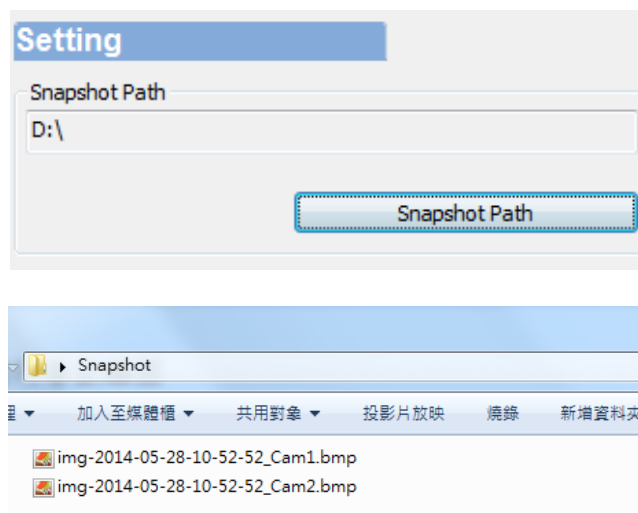


- (1) Select the path of the memory disk or a backup file on the hard disk.
- (2) Double click the desired footage to play the file.

M. Snapshot Tool

While playing a footage on the software player, you may take a snapshot of the current frame by selecting  snapshot tool is will showing the window below.

The image had been shot can be found in /Snapshot folder. Otherwise, The player can selecting  setting the destination folder and save the file to *.bmp format.




N. Formatting / Restoring the Memory Disk

Q1. Under which condition you require format Memory disk?

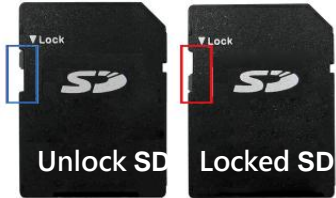
Before using a newly purchased memory disk, or when repurposing a used disk for the device, the memory disk must be formatted first.

Q2. When you need to restore the Memory Disk?

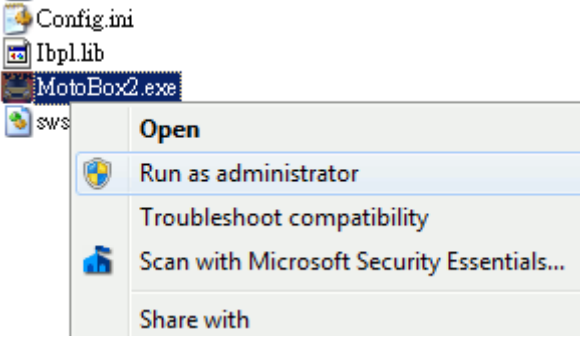
If you want to repurpose the memory disk for other uses (e.g. for computer or digital camera), you need to restore the disk. All recorded data will be erased from the disk

**CAUTION**

(1) Before formatting or restoring, make sure the disk is unlocked.



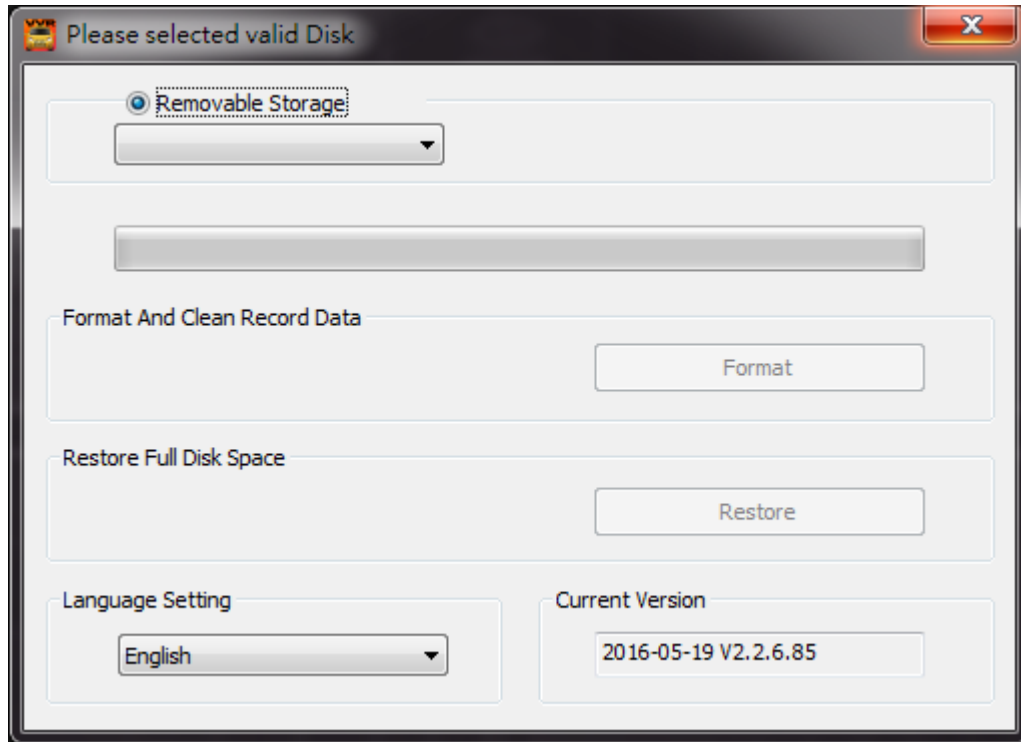
(2) If you are still unable to format/restore the memory disk, close the software player, and then re-open the player as administrator:



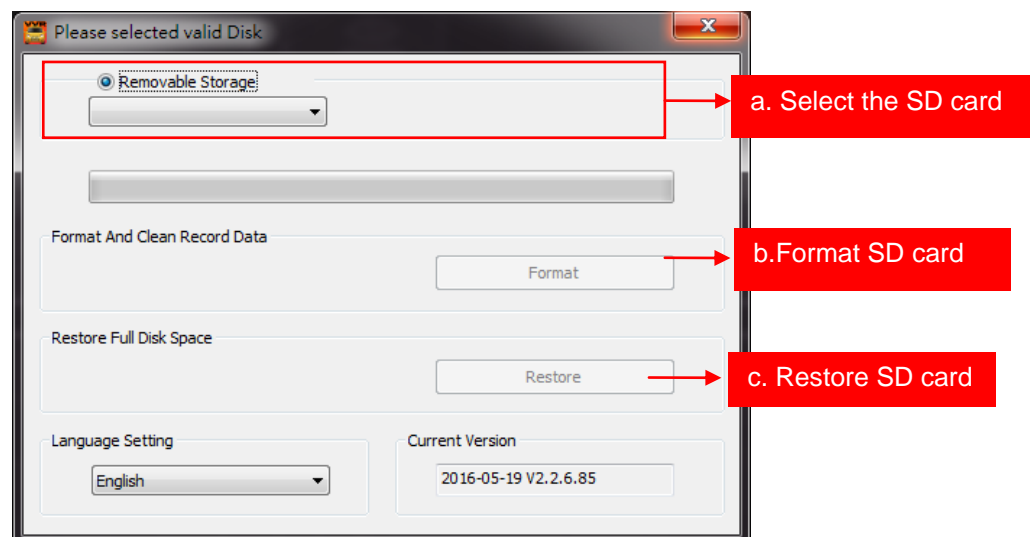
Q3. How to format/restore the memory disk?

To format/restore the memory disk :

- (1). Plug SD card in to card reader, then plug carder reader into PCs USB slot ◦
- (2). Run the palyer software ,select  to open the disk format window.



- (3). Select the memory disk,as your requirement select the Format or Restore button.



- (4). SD card only can be use after been 「format」 or 「restore」 .

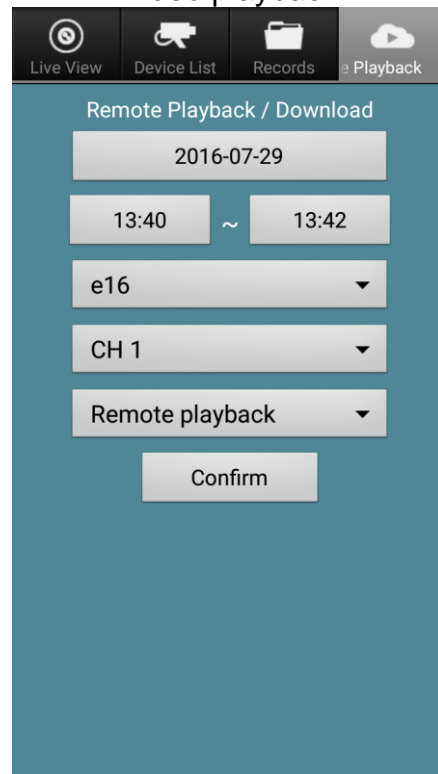
O. WiFi Connection

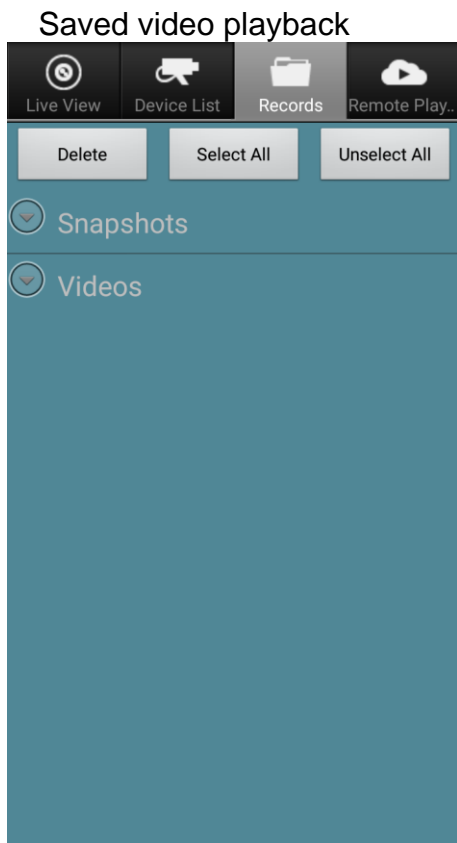
1. Play store search "VacronPlayer" and download.
2. Open WLAN then link 「 SSID,」with password 「 12345678 」 (to change SSID and password please refer to page 20)
3. Open APP "VacronPlayer", click 「 device list 」 open new, then type any name you like.
4. Click the device name just named, then switch to 「 all channel, the live view will show up right away.
5. There are four functions available : Live screen shoot 、 Live video record 、 video playback 、 video download.
6. Can also watch saved video or photo.

CH-1



Video playback





Device info

Add

WiFi

Host Name

Host Addr.

Media Port

Account

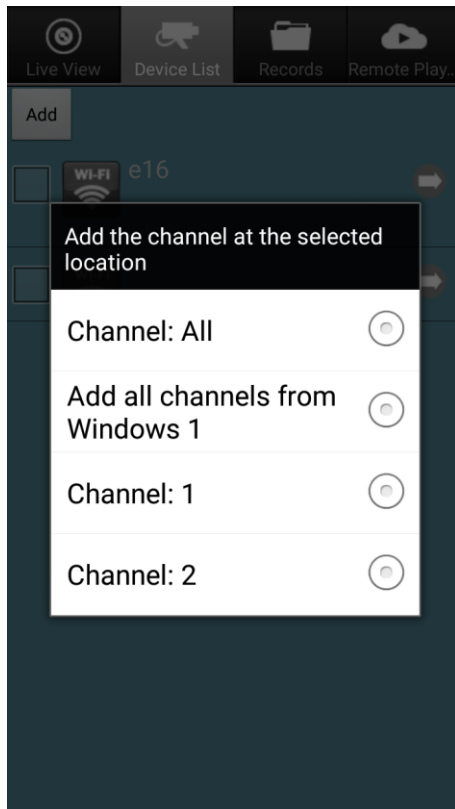
Password

Channel

Device list

Set up a new device

1. Name a device
 2. IP on the device : WIFI will automatic find the IP address
 3. Stream port number : preset on 80
 4. Account number : preset admin
 5. password : preset (don't need to change)
 6. Device channels : depend on the device cameras
- When done set up, save then log out.



Chose to display all channel on this device, it will jump to channel one for live view.



CAUTION

1. Live view will be delay because of the network data transmission.
2. Video playback can only be use if date is still on the SD card, if the data has been rewrite, then will not able to be find/download.
3. Please disconnect the WiFi after use, otherwise might not able to use internet on your device.
4. If there is not HUD as option, please use PC and mobile device once every month to keep system run normally.



For more info
Please check our website
<http://vvr.vacron.com.tw>

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