4G/WiFi In-Vehicle Surveillance & GPS Tracking System

Quick Start Guide

Thank you for purchasing a Securview Vehicle Surveillance & Tracking System
This Quick Start Guide covers basic setup, installation and use of your surveillance system.
For more information, please visit: **www.securviewcctv.com**

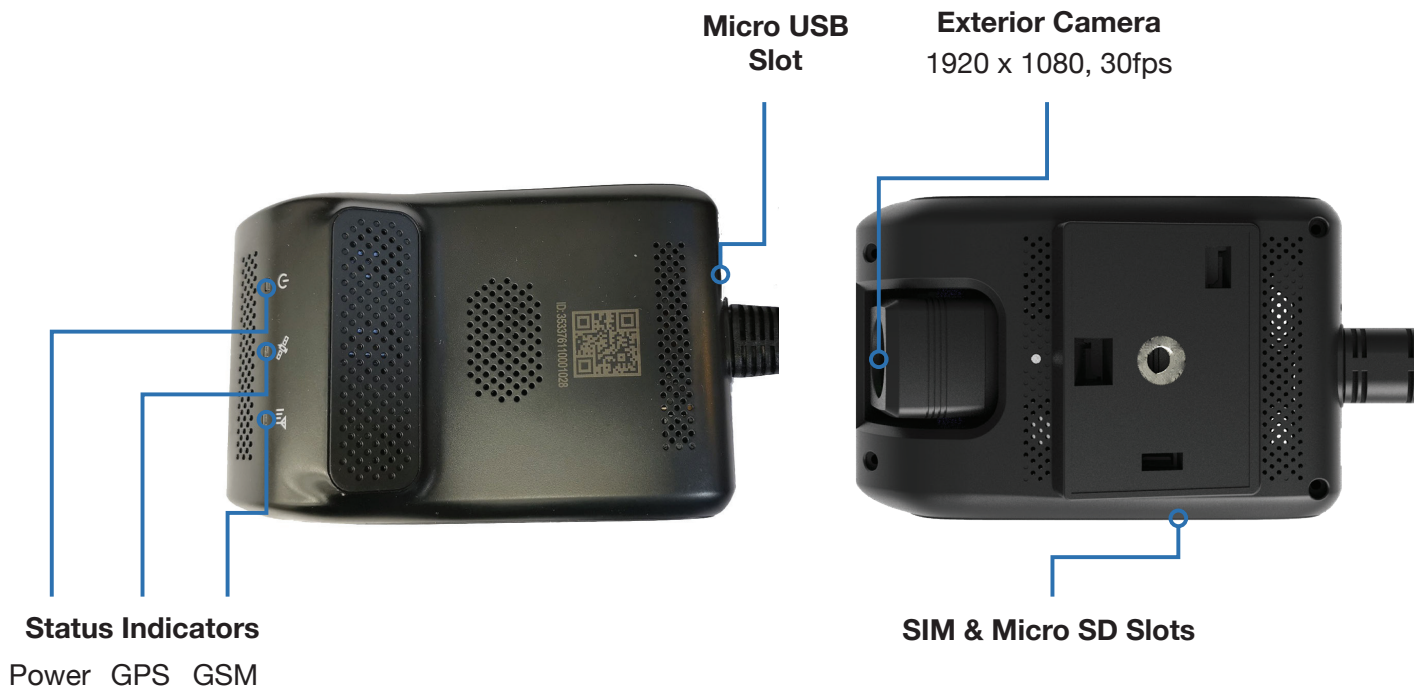| Included Components	
Surveillance/GPS system & mounting cradle	External camera
Power wiring harness	SOS alarm button / External backup Battery
12V 40A relay & relay cable	2 x 3M adhesive mount

vQ320

1. Overview & Installation

1.1 System Diagram

Micro USB Slot

Exterior Camera
1920 x 1080, 30fps

Status Indicators

Power   GPS   GSM

SIM & Micro SD Slots

Note: The SIM card and Micro SD card sockets are push-in-push-out type. Do not use any tools to extract cards.

Micro SIM Card   **Micro SD Card**
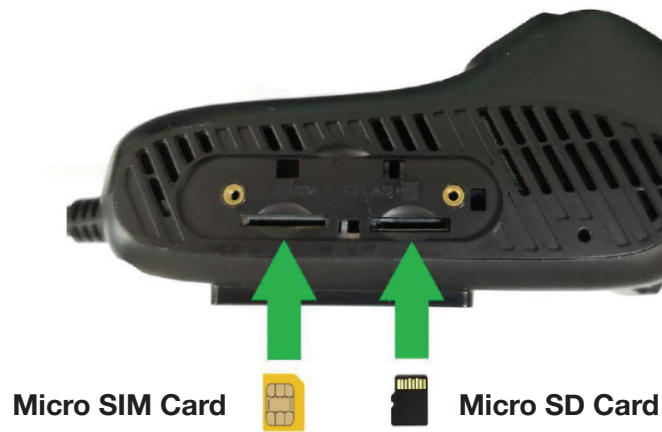
Golden contacts face up
*Warranty void if cards are inserted
the wrong way*

1.2 Technical Specifications

|	Model	MDVR-J400
Camera	Camera Style	Windscreen-mounted road camera, Dash-mounted driver camera
	Resolution	**Road:** 1080p (1920 x 1080) / **Driver:** 720p (1280 x 720)
	Angle of View	**Front:** 120° (adjustable) / **Rear:** 100°
	Focus	Fixed
	Frame Rate	30fps (Dynamic)
Features	CPU	ARM Cortex A53 1.4GHZ
	Band	**GSM** 850/900/1800/1900 / **WCDMA** B1/B2/B5/B8 / **FDD** B1/B3/B5/B7/B8/B20 / **TDD** B38/B39/B40/B41 (100M)
	G-Sensor	9 axis-motion
	Live View	In-car / front car live video via app or web
	Audio	Built-in microphone / Built-in speaker
	WiFi	802.11 b/g/n, 2.4GHz frequency, hot spot
	Bluetooth	N/A
	Micro SD storage	Max 128GB
	Battery	External 450mAh
Interface	OBD Interface	Connect by power cable
	USB Data Interface	Micro USB 5 Pin *(For engineering purposes only, not for data backup)*
	Housing	Plastic
	Power Input	9 ~ 36VDC
	Dimensions	109 x 69 x 52mm
	Weight	0.23kg
	Operating Environment	-20°C to 75°C / RH95% (max)

1.3 Installation

1.3.1 Wiring

Connect cables according to *1.3.2 Wiring Diagram.* Connect the power cable B+ (Red wire) and GND (Blackwire) to the vehicle battery's +12V/+24V terminal and negative terminal respectively. Connect ACC (Yellow wire) to the vehicle's ON position .The device should power on automatically after the vehicle engine is started.
Remember to connect the battery backup module.

1.3.2 Wiring Diagram
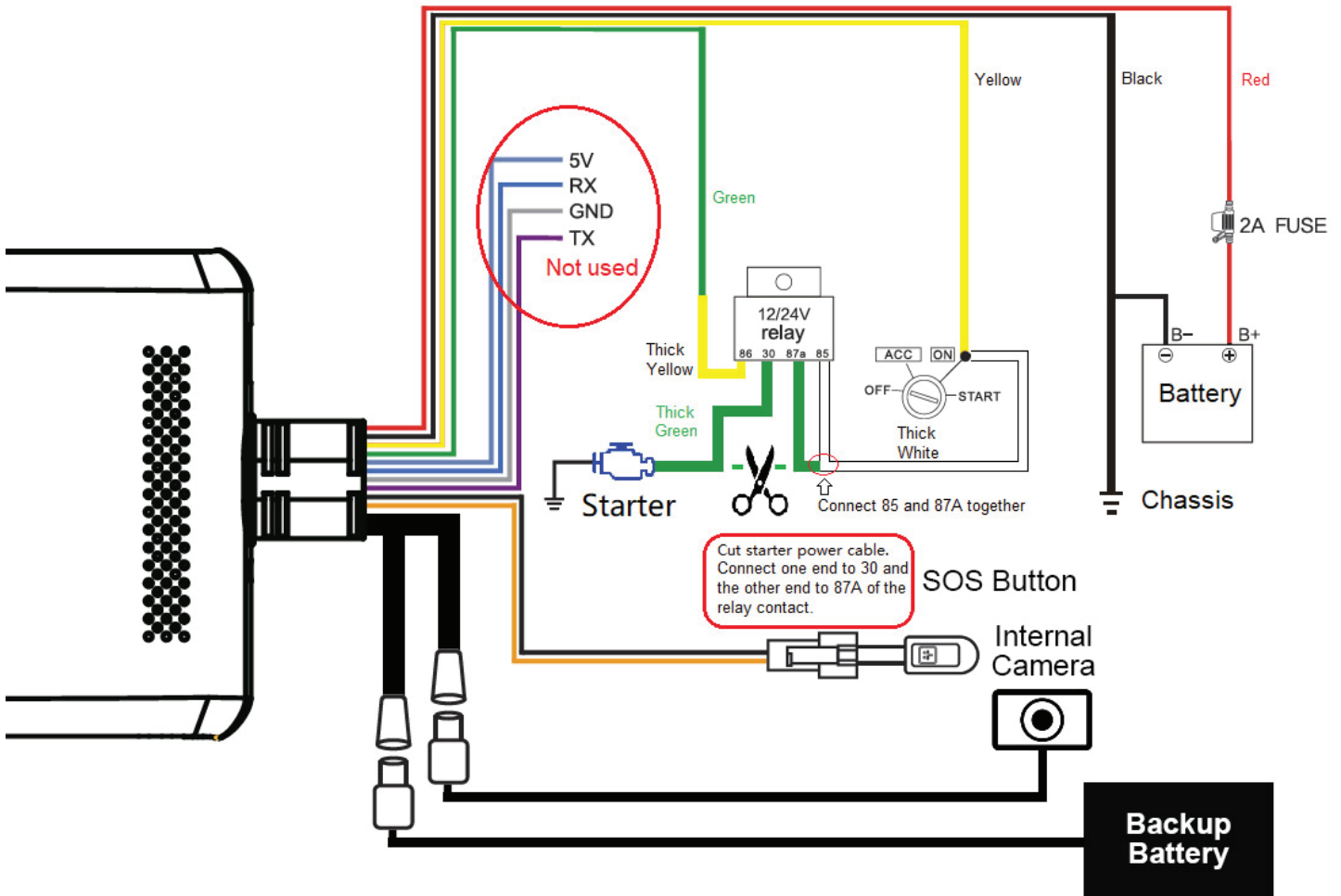
1.3.3 Micro SD and SIM Card

While the system if off, insert a Micro SD card into T.FLASH slot and an active SIM card into the SIM slot (both located on one side of the camera). After inserting both cards, screw on the card cover with the provided screw & screwdriver.

1.3.4 Status Indicator Lights

Power Indicator (RED)	●	Solid red	ACC ON & Power on
	☀	0.1s ON & 10s OFF	ACC OFF
	●	Off	Power not connected
GPS Indicator (GREEN)	●	Solid green	ACC ON & Positioning succesful
	☀	0.1s ON & 1s OFF	Searching for GPS signal
	●	Off	ACC OFF
3G Indicator (BLUE)	●	Solid blue	ACC ON & Connected
	☀	0.1s ON & 1s OFF	ACC ON & No network/SIM card
	●	Off	ACC OFF

1.3.5 SIM Card

Ensure you are using an **active Micro SIM card** (or Nano SIM with adapter). Standard SIM cards will not work.
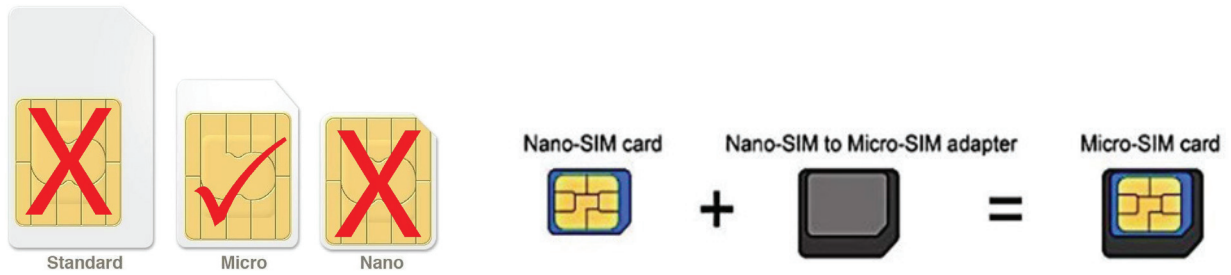
- **4G SIM card required (4G+3G).** 3G SIM cards will not work (3G+2G).
- Must have **data, voice and SMS** capabilities.
- Must be able to monitor data usage, check balance and automatically/manually top up remotely.

1.3.6 Car Status Update

All driving data and car status are uploaded to the web server, there is some delay between the car status on the web server and real situation. For example, when the car switches its engine ON/OFF, its on/off status will be updated on the web server and indicate one the APP after 10 seconds or more. For the Device List menu which shows all registered devices, you need to update the status manually by "pull-to-refresh".

2. Operation

2.1 Automatic & Event Recording

2.1.1 Automatic Recording

ACC ON - The system will power on and record automatically.
ACC OFF - The system is in sleep mode and will not record.

Recordings will be saved onto the micro SD card every 3 minutes, under the directories:
DVRMEDIA/CarRecorder/GENERAL/ForwardCam (road camera)
DVRMEDIA/CarRecorder/USB/InwardCam (driver camera)

NOTE: *When the Micro SD card is full, old footage on the card will be overwritten.*

2.1.2 Event Recording

If a strong vibration is detected (from a crash, for example), an additional 15s will be recorded and then stored in a separate location under
DVRMEDIA/CarRecorder/EVENT

The EVENT folder stores 1GB of footage. Old recordings in EVENT will be overwritten when the folder is full.

2.2 System Usage

2.2.1 SIM Card Usage

This system is intended for use with a SIM card, but can still function as a mobile video recorder without one. Refer below to see what the system can do with and without a SIM card:

SIM Required
- Remote Live View
- Remote GPS Tracking
- Remote Picture/Video Capture
- Push Notifications (Geo-fence, vibration alert, etc.)

SIM Not Required
- Automatic Recording
- GPS History Logging
- Event History
- Media Synchronisation

2.2.2 App & Web Usage

The system can be accessed, monitored and configured via mobile app and web browser. Visit:
www.tracksolid.com. for web version.

3. Configuration

3.1 App Introduction

Your vehicle monitoring system can be accessed, monitored and configured via mobile app.

Switch between cameras on your account on the phone.

3.1.1 App Intro

The vehicle tracking app is **Tracksolid**, available to download free from iPhone App Store & Google Play Store.

This app allows for portable vehicle management, letting you perform a variety of functions such as:

- Real-time GPS vehicle tracking & location reporting
- Real-time push notifications for overspeed, vibration, geo-fence etc.
- Geo-fencing - alerts account when the vehicle enters or leaves a designated zone
- Route playback for vehicle history
- Remote live view, playback, image snapshot & video snapshot
- Media synchronisation for easy file transfers from recorder
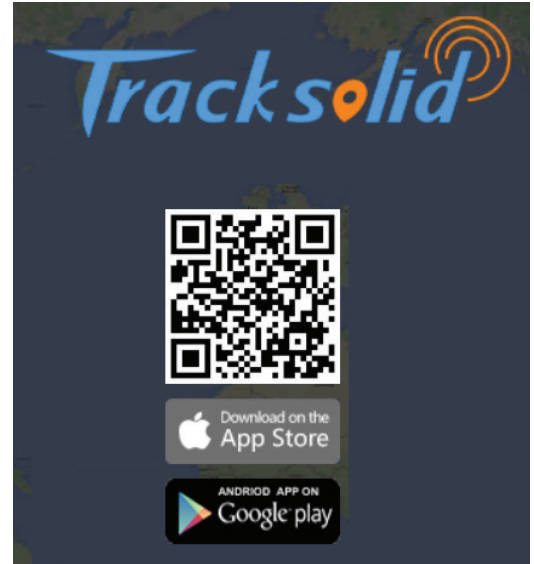
3.2 Account Registration

3.2.1 Account Creation

1. Press **Sign Up** on the front page of the app.
2. Enter your email address and tap **Next** to send a verification code to your email address.
3. Enter the verification code into the app and tap **Next** again to finish creating your account.

3.2.2 Change Password

1. (App) Open the Home screen and tap the **user icon** next to your email address.
2. Tap **Change Password**.
3. Enter the current password, then enter your new password twice and tap **Save**.

Note: After account registration, you will be automatically prompted to bind a device.

3.3 Binding Your Device to an Account

3.3.1 Adding Your Device

1. Tap the '+' icon on the **Home** screen.
2. Enter the 15-digit IMEI then tap **Add Device** to continue or scan the QR code of your device which is printed on the top cover of the camera.
3. Enter the device name, number plate of the vehicle, driver name, contact number and select a device icon. Tap **Save** to finish.

3.3.2 Unbinding Your Device

1. Open the Home screen and tap **List** to enter the Device List menu.
2. Tap the ⋮ icon on the device to be unbound.
3. Tap **Unbound** to continue.
4. Tap **OK** to confirm.

Note: MDVR-J400 cameras can only be bound to one mobile phone at a time. If you want to register the device on another mobile phone, you must unbind the device on the original mobile phone first.

3.3.3 Device Settings

1. Open the Home screen and tap **List**.
2. Tap the ⋮ icon on the device to edit, then tap **Settings**.
3. You can edit Alert Settings, Overspeed Alert, Driving Behaviour, Vibration Alert, Crash, LED, Voice, SOS and Geo-fence Video settings of your device.

Note: DMS (Driver Monitoring System) is only for AI models, and is not applicable for MDVR-400.
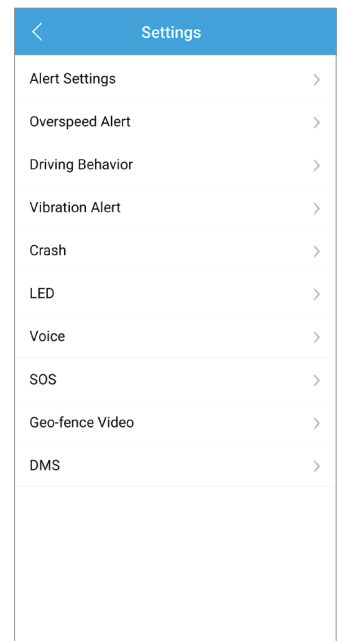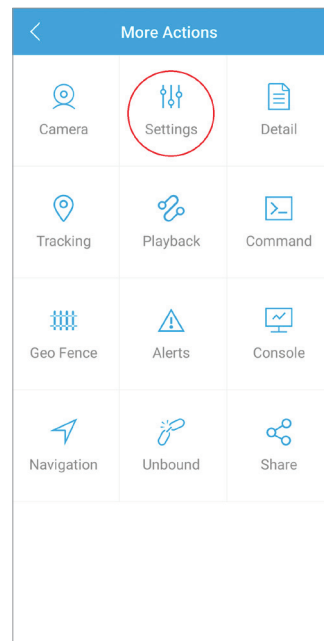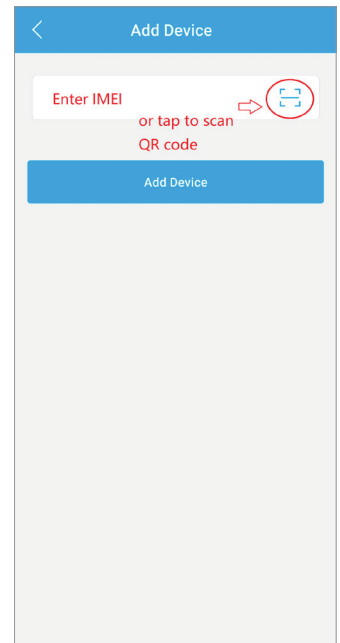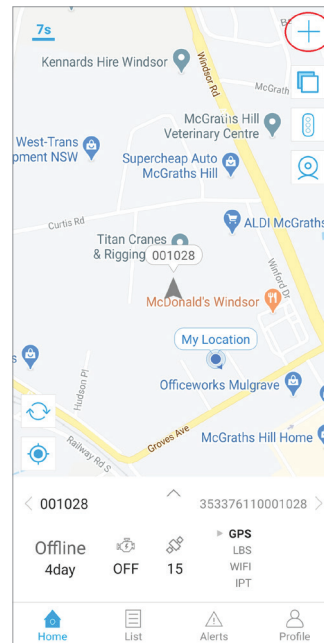
3.3.4 Vibration Alarm

- When ACC is ON, Vibration alarm is disabled.
- When ACC is OFF, the Vibration alarm will switch on automatically after 5 minutes. If vibration is detected, the device will report alarm condition in 5 seconds. If ACC is ON within this 10 second period, the alarm reporting and vibration alarm will be canceled otherwise it will alarm for 30 seconds.
- After the alarm period, the device stops detecting variation alarm for 1 minute. After 1 minute, it will resume vibration alarm. The sensitivity of the vibration sensor is adjustable on the App as described above.

3.4 Emergency Functions

3.4.1 SOS

- The SOS button allows you to send a defined SOS message to the APP user and call up to 3 SOS numbers.
- SOS button will activate only if the button is pressed and held down for more than 3 seconds.
- Note: SOS alert must be enabled in the Alert Setting menu.
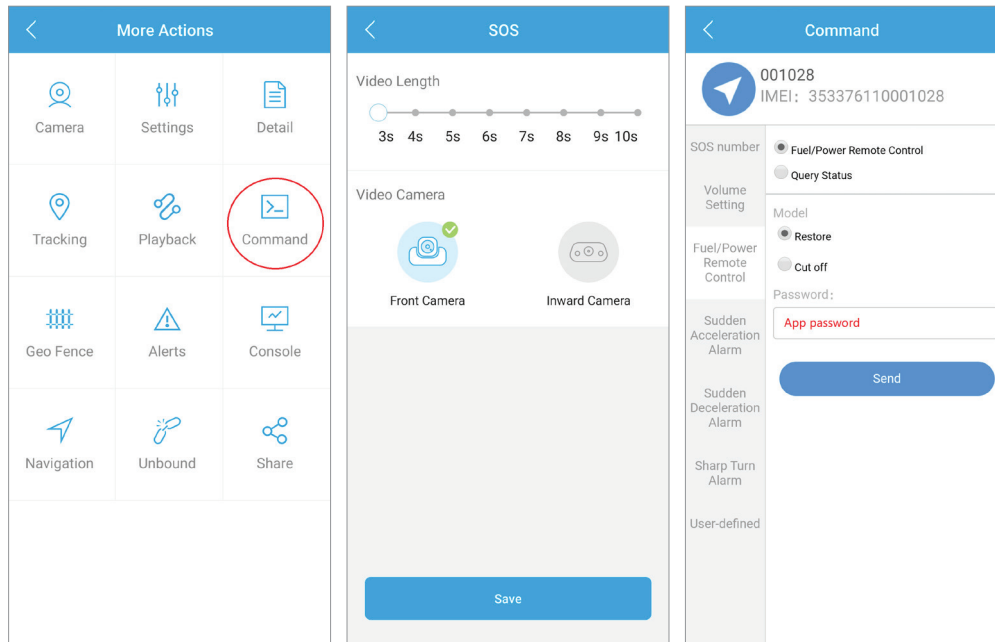
1. Select the device to set in the List menu then and tap Command.
2. Tap SOS number:
   - Select SOS setting to enter numbers
   - Select Delete SOS number setting to delete numbers
   - Select Query SOS number to check SOS numbers already set
3. Tap Send to confirm.

3.4.2 Starter Cut

To cut the start cut:
1. Tap Fuel/Power Remote Control.
2. Select Cut off
3. Enter the App password then tap Send to to confirm.

To restore starter:
1. 1. Tap Fuel/Power Remote Control.
2. 2. Select Restore
3. 3. Enter the App password then tap Send to to confirm.

Note: *For safety reason, remote engine cut will be disabled when the car is moving faster than 20km/h.*
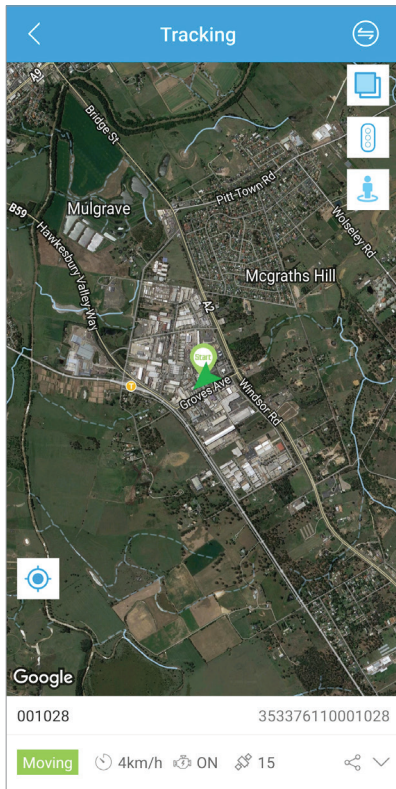
GPS satellite view (App)
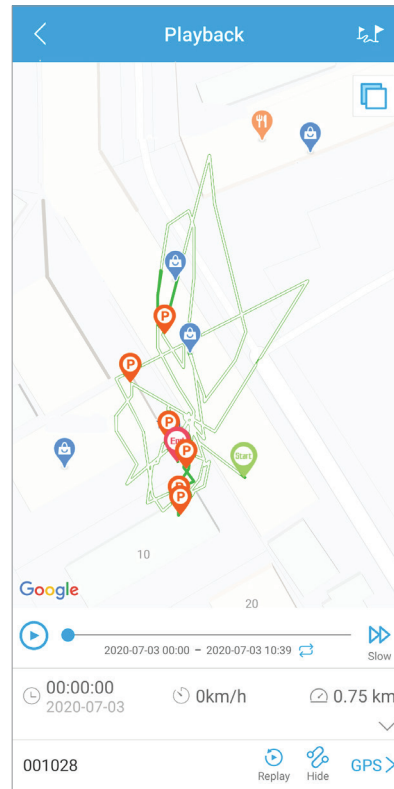
Path playback (App)

3.4.1 Positioning

1. Open the **Device List** screen and tap the device to see the device location.
2. This will display a live GPS display of your current vehicle location(s).
3. Tap **Detail** to view details about the vehicle (including engine status, last time the vehicle was moved, IMEI & more).

3.4.2 Track History & Path Playback

1. Open the **Device List** screen and tap the **Playback** icon under the device list to see the device track history.
2. Select the time interval to playback.
3. This will open a list of previous trips the vehicle took, including start/end times and locations, as well as total distance travelled.
4. Tap any of these trips for a detailed GPS map displaying the full route the vehicle took.
5. Use the slider at the top the skip to different parts of the playback. Map/satellite view and playback speed can be toggled with the buttons at the top right.
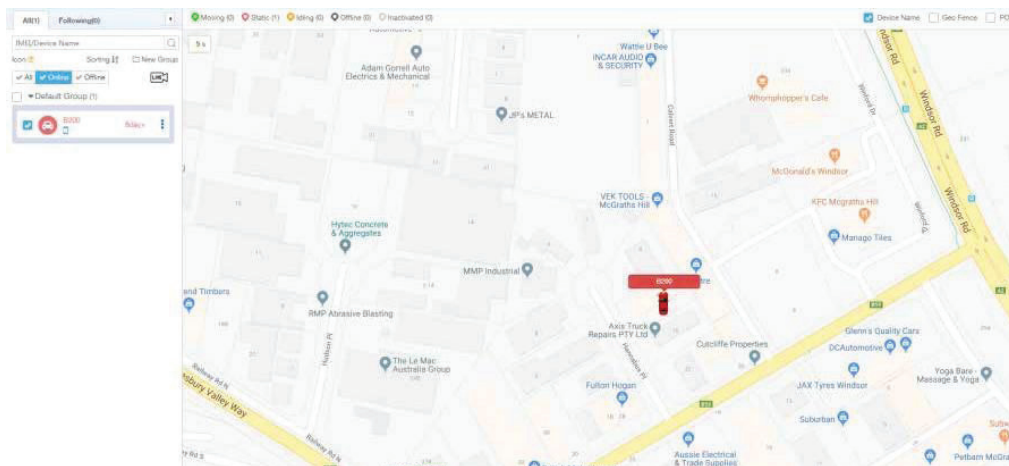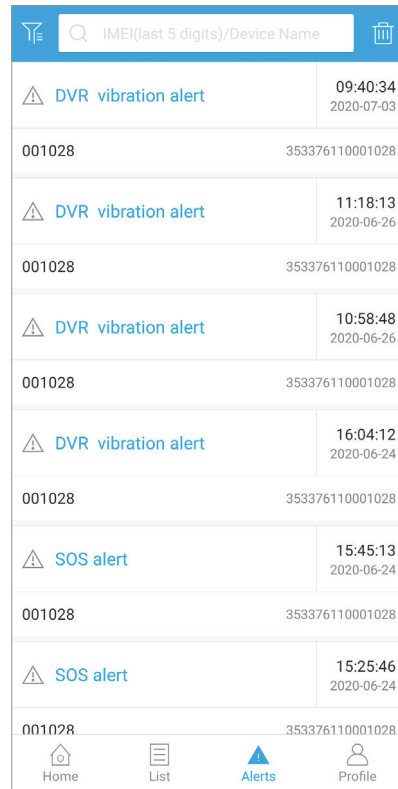

GPS tracking (Web)
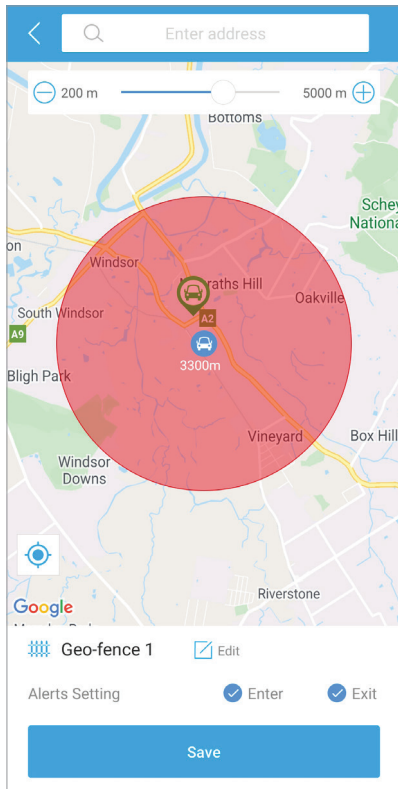
Creating a geo-fence (App)

Alert log (App)

## 3.5.1 Geo-fence Intro

Geo-fences are GPS zones you can designate on a map. When your vehicle enters and/or exits the geo-fence, you can set the device to send a notification alert to your account.

3.5.2 Creating a Geo-fence

1. Tap **List** to open the Device List screen.
2. Select the vehicle(s) you want the geo-fence to apply to. Tap the ⋮ icon then tap **Geo Fence**. A list will appear showing all created geo-fences. Tap **+** to make a new one.
3. A GPS map will appear. Navigate and place the geo-fence, then adjust its size using the slider.
4. After setting the geo-fence zone, tap **[Edit]** to enter a name for the geo-fence.
5. Tap **Save** to confirm.
6. Select one or both of the **Alert settings (Enter/Exit)**. to receive notifications on vehicle geo-fence enter/exit.

NOTE: *Using the app, you can only create circular geo-fences. More precise geo-fences with individually drawn lines can be created from the website (**www.tracksolid.com**). Some features of the website are still under development; it will be more powerful in the later version.*
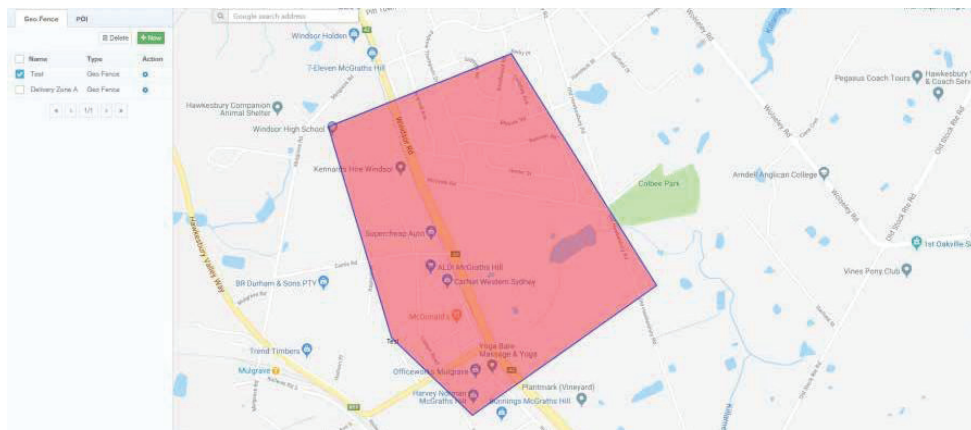
Creating a geo-fence (Web)

3.6 Camera Remote Access
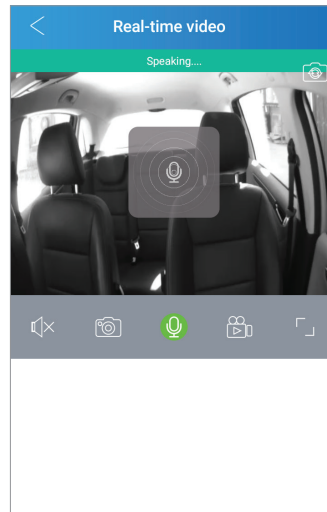
3.6.1 Real-time Video Overview

1. Open the Home screen and tap Remote Video.
2. Tap the **left camera icon** at the top right to start live viewing the camera in real time. This may take a few seconds to load, depending on your mobile network.
3. From here, several actions & options are available:

- **Switch camera:** Tap the camera icon at the top right (overlayed onto the video) to switch between the road and driver cameras.
- **Playback:** Tap the video screen to bring up a time bar. Scroll through to play recorded footage.
- **Mute:** Mute/unmute the camera's microphone.
- **Screenshot:** Saves a snapshot from the current camera display.
- **Two-way talk:** Hold to talk through the camera with your phone.
- **Record:** Record a clip from the camera display.
- **Full screen:** Toggle portrait/landscape display modes.

Two-way talk

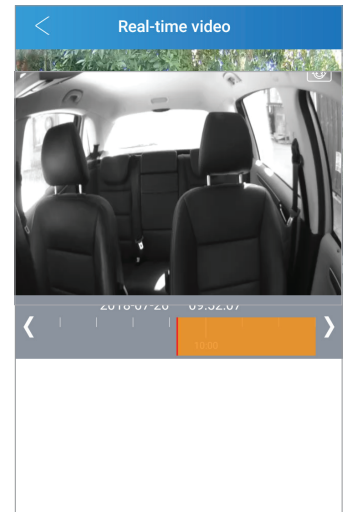*Playback time bar*

3.6.2 Remote Picture

1. Open the **Home** screen and tap **Remote Picture**.
2. In this menu, you can look through all snapshots taken from the camera. Tap any of them to display them full-screen.
3. To save a snapshot to the camera, open an image and tap **Save to album**.
4. To take a new snapshot, tap the **camera icon** at the top right.
5. To share an image, tap **Share** at the bottom right, then select the snapshot(s) to share and tap OK.

Remote Picture menu

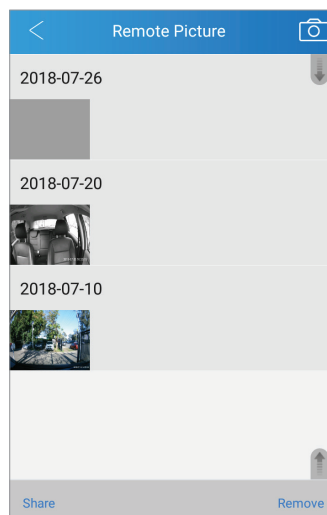*Taking a new picture*

3.6.3 Remote Video

1. Open the **Home** screen and tap **Remote Video**.
2. In this menu, you can look through all video recordings taken from the camera. Tap any of them to download, then tap again to play.
3. To save a new recording, tap the **right camera icon** at the top right. Select the **Internal or External Camera** to record and a length of time, then tap OK.
4. To share an image, tap **Share** at the bottom right, then select the videos) to share and tap OK
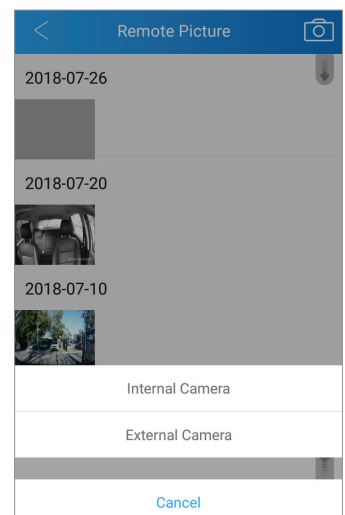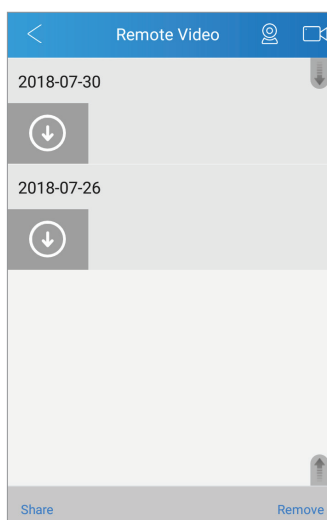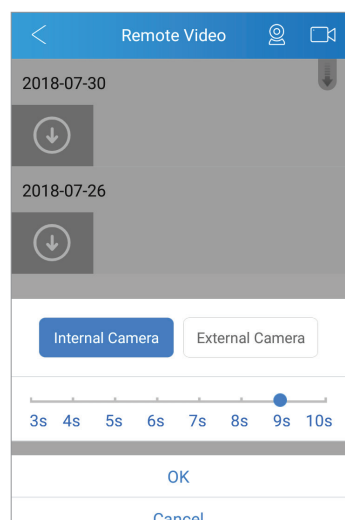

Remote Video menu

Capturing a video clip

3.7 Media Center & Backup

3.7.1 Local Media Library

1. Open the **Device List** menu.
2. Tap the   icon on the device you want to set then tap Camera.
3. Tap the **Media** on the title bar on top to select local or remote **Media Center**.
4. In this menu, you can view, share or delete any saved snapshots & videos

3.7.2 Backup via Media Sync

1. In the **Media Centre** menu, tap the **SD card icon** on the top right of the screen to connect the mobile to the camera's WiFi hotspot. To connect, the camera must be powered on with the mobile nearby. Ensure that the blue GSM indicator on the camera is solid blue (not flashing).
2. If WiFi hotspot is connected successfully, the folders on the Micro SD card will be shown. If not tap the Go to **SD card button** to connect manually.
3. Select **Photo** or **Video**.
4. Select the camera to backup

NOTE: *The username of the hot spot is the IMEI. The password is the last 8 digits of the IMEI. These can both be found on the camera or on the App.*
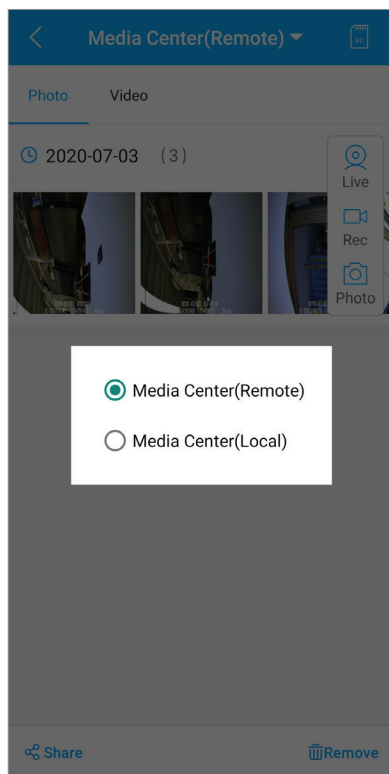
Local media library
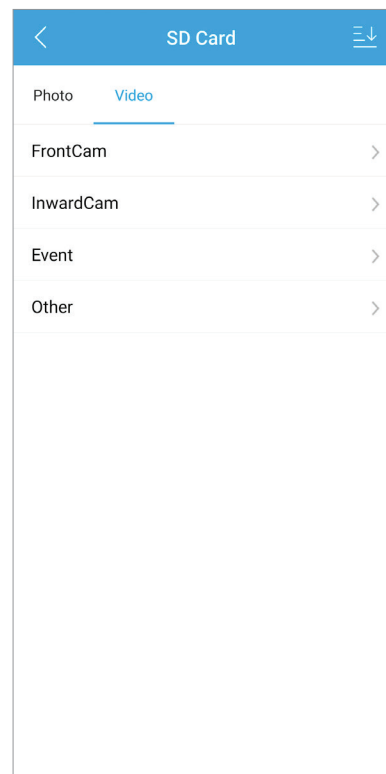
Media backup by WiFi

3.7.3 Backup via Micro SD

Remove the Micro SD card from the camera. Insert the card into a memory card reader connected to PC. Then copy the files from the card reader to the PC for backup.

3.7.4 WiFi Hotspot

When WiFi hotspot is **ON**, you can also connect to this WiFi hotspot to access to the internet. The WiFi is actually using SIM card data. However, we **DO NOT** recommend users use this SIM card to access to the internet for other devices as the data usage may exceed the SIM plan and no more remote monitoring can be done.

Note: *To turn the WiFi hotspot ON, you must connect to the Micro SD card as described in section 3.7.2 even though you don't want to backup the Micro SD card. The WiFi hotspot will switch off when you quit the backup menu or ignition is switched OFF.*
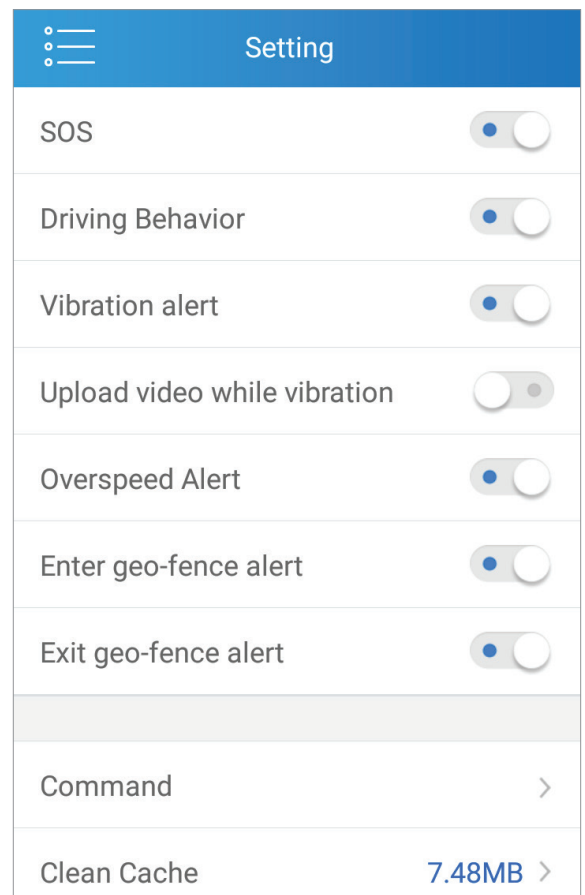
3.8 Notifications

3.8.1 Notification History
1. Open the main menu and press **Notifications**.
2. This menu will display a complete history of the device's notifications, including details on the time, date and type of notification. Scrolling to the bottom of the page will load older notifications.
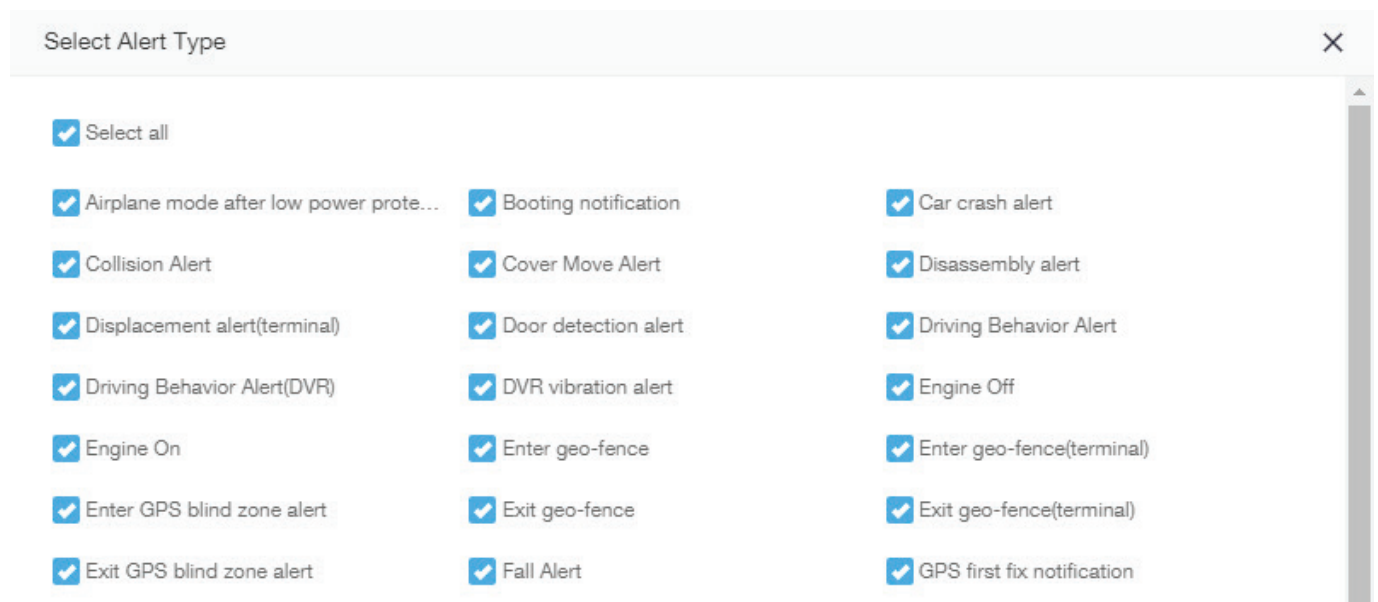
3.8.2 Notification Events
The camera can alert the account of a wide list of events, which can be toggled on/off from the app and website.

- Collision / crash alert
- Vibration alert
- Enter / exit geo-fence alert
- Driver behaviour alert
- Engine on/off alert
- Overspeed alert
- Night driving alert
- GPS blind zone alert
- SOS alert
- Low battery alert
- Power off alert
- Disassembly alert

Setting	
SOS	●
Driving Behavior	●
Vibration alert	●
Upload video while vibration	○
Overspeed Alert	●
Enter geo-fence alert	●
Exit geo-fence alert	●
Command	›
Clean Cache	7.48MB ›

Setting notification alerts (App)

Select Alert Type ✕

- ☑ Select all
- ☑ Airplane mode after low power prote...
- ☑ Booting notification
- ☑ Car crash alert
- ☑ Collision Alert
- ☑ Cover Move Alert
- ☑ Disassembly alert
- ☑ Displacement alert(terminal)
- ☑ Door detection alert
- ☑ Driving Behavior Alert
- ☑ Driving Behavior Alert(DVR)
- ☑ DVR vibration alert
- ☑ Engine Off
- ☑ Engine On
- ☑ Enter geo-fence
- ☑ Enter geo-fence(terminal)
- ☑ Enter GPS blind zone alert
- ☑ Exit geo-fence
- ☑ Exit geo-fence(terminal)
- ☑ Exit GPS blind zone alert
- ☑ Fall Alert
- ☑ GPS first fix notification

Setting notification alerts (Web)

3.9 User Commands via SMS

3.9.1 User Commands

You can send SMS message to the device to perform simple tasks. Refer to the table below:
*Default password is: **666666***

Command	Default Value	Command Format	Description
VERSION	-	VERSION#<password>	Check the firmware version
PARAM	-	PARAM#<password>	Get IMEI, GPS upload interval and timezone information
STATUS	-	STATUS#<password>	Get GPS signal strength and engine on/off status
PASSWORD	666666	PASSWORD# <Old password># <New password>	Change password
RECOVER	999999	RECOVER#999999	Cut starter
RESTORE	-	RESTORE#<password>	Restore starter
REBOOT	-	REBOOT#<password>	Reboort the device
ADD SOS	-	SOS#<password>#A# <Number 1># <Number 2># <Number 3>	Add SOS numbers
CHECK SOS	-	SOS#<password>	Check SOS numbers
DELETE SOS	-	SOS#<password>#D# <Number 1># <Number 2># <Number 3>	Delete SOS numbers

SECURVIEW™

This product features a **2 year warranty**.

For more information, please visit:

www.securviewcctv.com

Quick Start Guide:
MDVR-J400 (Vehicle monitoring system)

vQ320