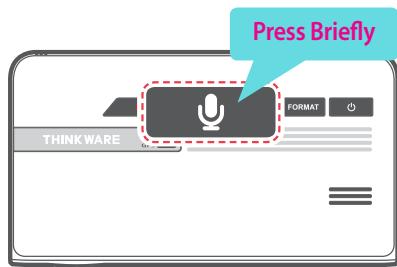


2-10. Audio Recording

► Briefly press the Voice Recording () button to turn the audio recording on or off.

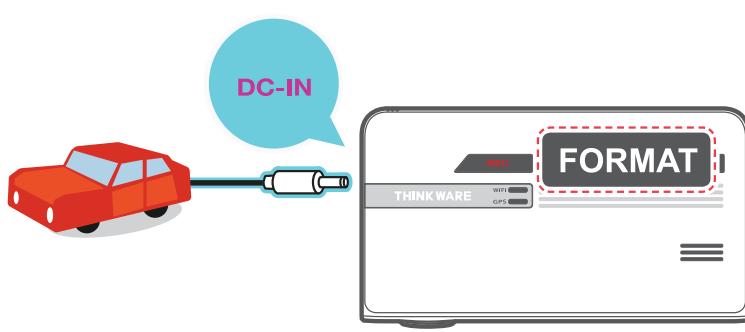


Cautions

- Users do not reserve the right to use the product for purposes other than as specified in this user guide. According to the Personal Information Protection Act and other related regulations, the user/owner may be held liable if the video and/or conversation recorded by the device are distributed without their consent. Thus, special attention should be paid in using this product.

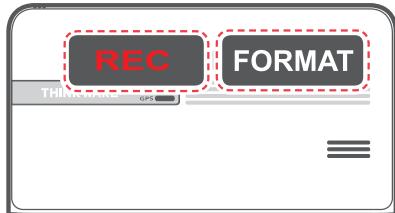
2-11. Formatting MicroSD Card

► Press and hold the FORMAT button for 3 seconds to initiate memory card format.



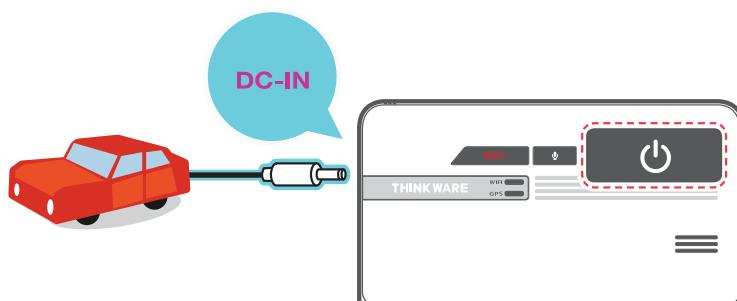
2-12. Initializing Device Settings

- ▶ Press and hold REC and FORMAT buttons simultaneously to reset the device settings to default factory settings.



2-13. Upgrading Firmware

- ▶ The system will automatically be updated if the MicroSD card contains the firmware upgrade file.
 - └ The device restarts automatically after the upgrade has been completed.
- ▶ Make sure your device is always up to date with latest firmware.
Please check back frequently at THINKWARE website (www.thinkware.com) for the latest firmware updates.
- ▶ Do NOT disconnect your device from power while it is being updated. This will result in damage to the dash cam.



3. Mobile Viewer Application

3-1. Thinkware Dash Cam Mobile Viewer

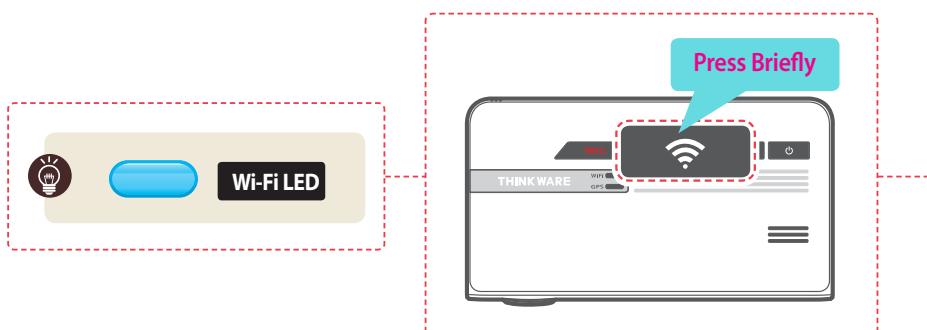
Thinkware Dash Cam Mobile Viewer App is available through Google Play and the App Store from iTunes.

- Mobile App device OS version requirements: Android 4.0 (Ice Cream Sandwich) or higher, iOS 7.0 or higher.
- You may disable Cellular data (Data networks) for using apps in some of devices operating Lollipop.
- For iOS devices, Wi-Fi settings can only be accessed using the smartphone or tablet settings.

3-1-1. Connect Wi-Fi with Password

- ① Download and install Thinkware Dash Cam Mobile Viewer application
- ② Press briefly the Wi-Fi button on the dash cam to enter Wi-Fi connection mode
- ③ (Make sure to turn on the Wi-Fi in the device setting for iOS devices) In the Thinkware Dash Cam Mobile Viewer application, turn on the Wi-Fi option, select "thinkware" from SSID list, and enter password as "123456789"

└ Password is only required during first time you try to connect.
The device will auto-connect in subsequent connections.



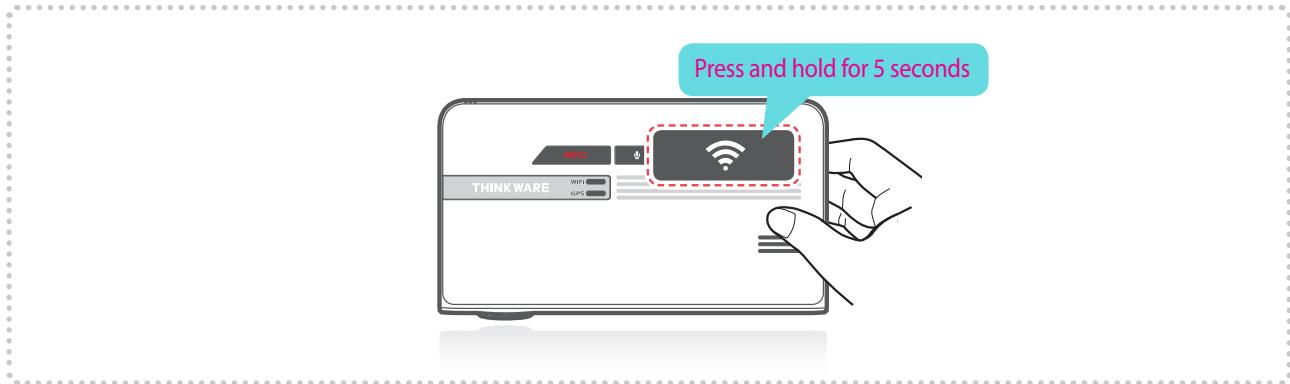
※ Dash cam will automatically turn off the Wi-Fi connection mode if not connected within 2 minute.

Cautions

- The distance range between the dash cam and connecting smart device is approximately 10 meters (33ft) in an open field environment.
- Use of ADAS features (road safety warning system) are restricted while being accessed using Thinkware Dash Cam Mobile Viewer.
- When device and mobile phone are connected over Wi-Fi, all control buttons of device will not be working, except power button.

► Connecting with WPS (Only Android OS)

- ① Download and install Thinkware Dash Cam Mobile Viewer application.
- ② Press and hold Wi-Fi () button for more than 5 seconds on the dash cam to enter WPS connection mode.
- ③ Select "WPS" button on the Thinkware Dash Cam Mobile Viewer application to automatically connect to the Thinkware dash cam using Wi-Fi. (takes approximately 20~30 seconds)
└  : Retry Wi-Fi search.

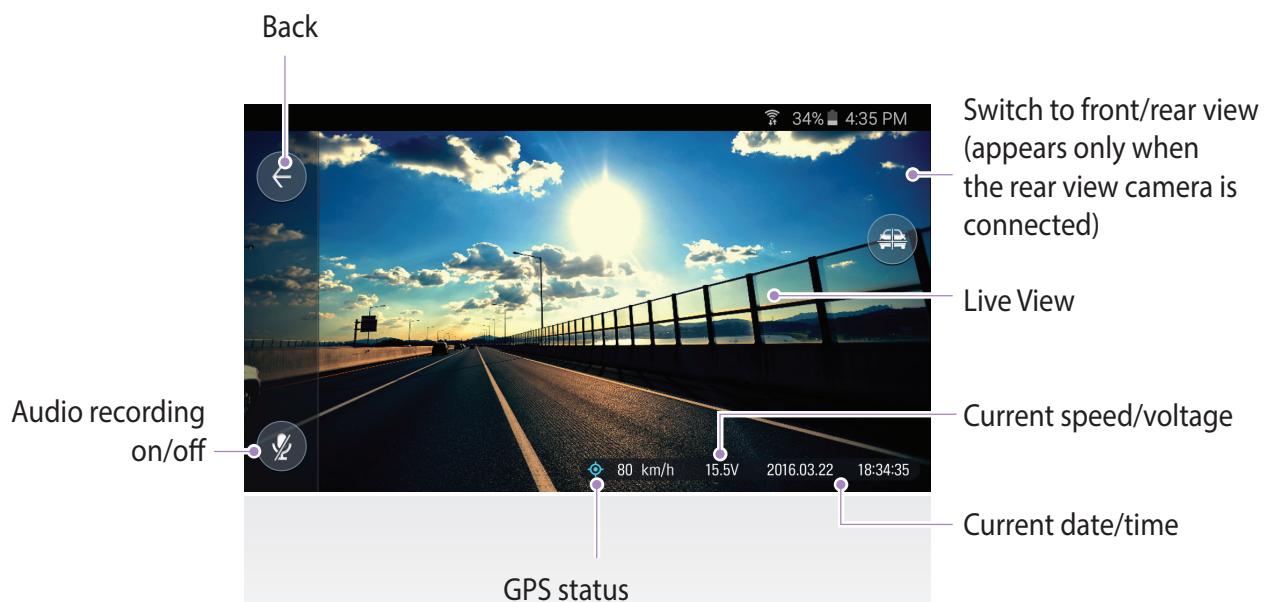
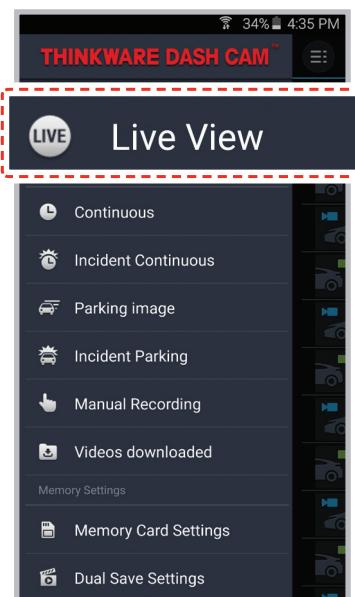


3-2. Thinkware Dash Cam Mobile Viewer Main Menu

Following section describing the Thinkware Dash Cam Mobile Viewer menu is based on Android devices. Layouts and screen captures might be slightly different for iOS devices.

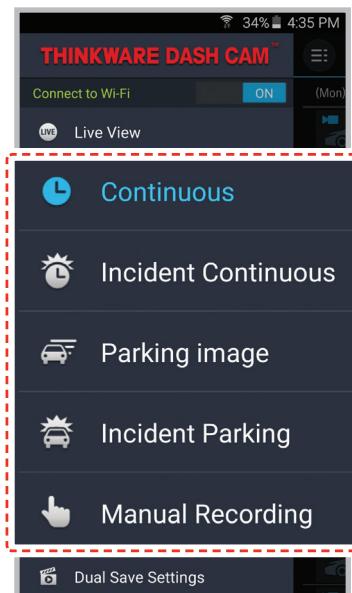
3-2-1. Live View

► **Live View** : When using Live View, the continuous recording will be disabled.



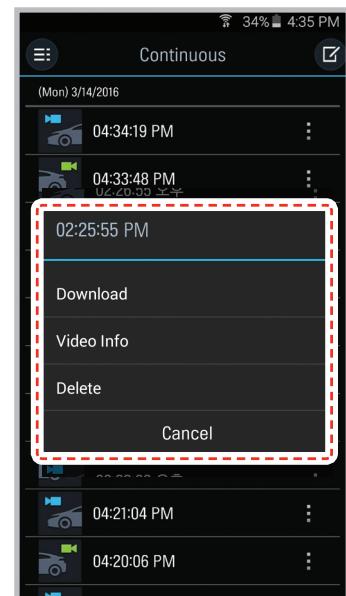
3-2-2. Video List

- ▶ **Continuous Recording** : Lists loop recording videos during continuous mode (in 1 minute segments)
- ▶ **Incident in Continuous Mode** : Lists incident recording videos during continuous mode
- ▶ **Parking image** : Lists motion detection recording videos during parking surveillance mode
- ▶ **Incident in Parking Mode** : Lists incident recording videos during parking surveillance mode
- ▶ **Manual Recording** : Lists manual recording videos initiated by selecting manual recording button

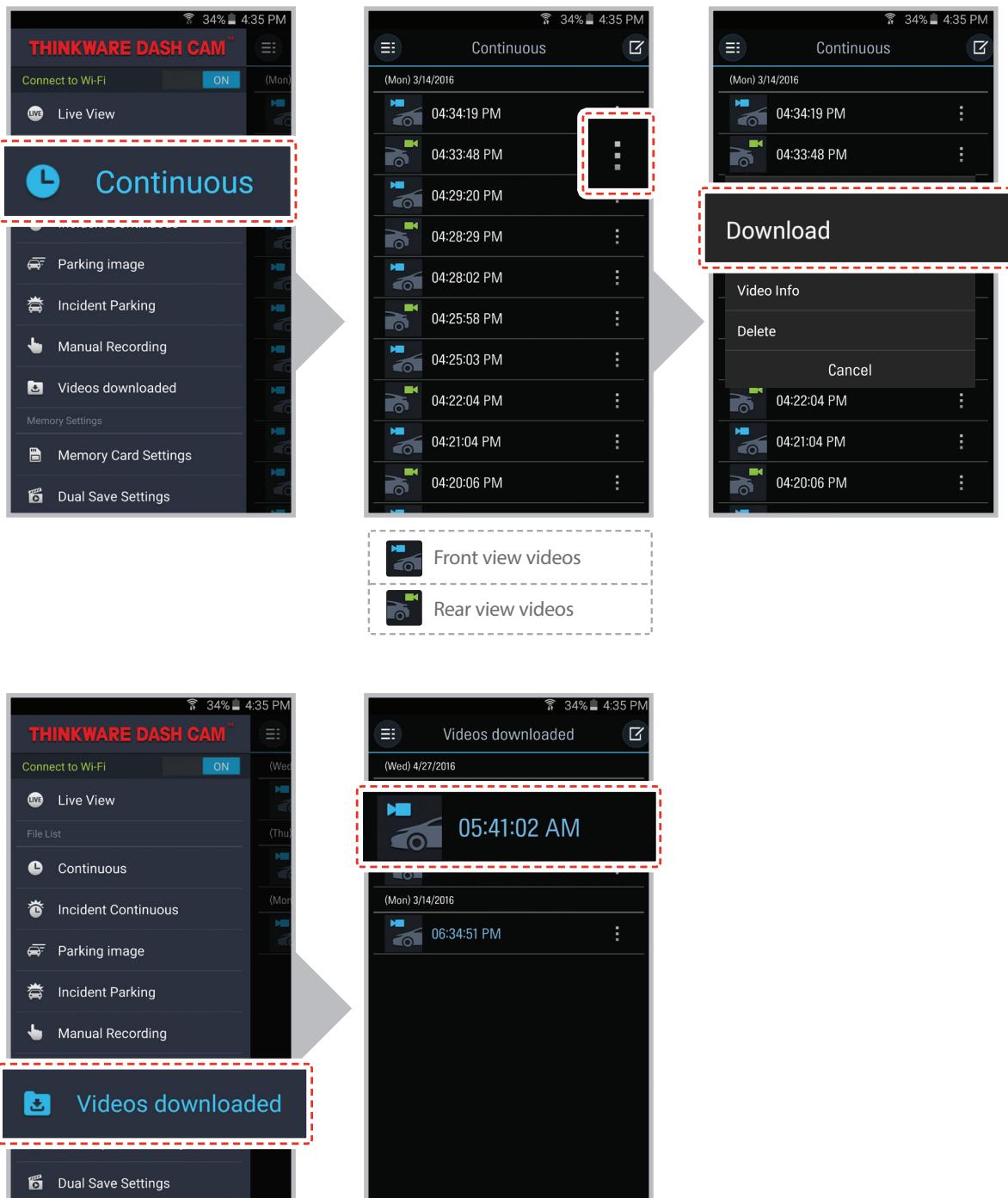


▶ Recording List Menu

- └ **Download** : Copies selected video file to the device from the dash cam MicroSD card (Wi-Fi must be connected)
- └ **Video Info** : Displays date/time, file name, recording type, size, duration, video quality for the selected video file
- └ **Delete** : Removes the selected video file



► Video download



Cautions

- For Android OS devices, it may take a while until downloaded videos are displayed in the list.

3-2-3. Memory Settings

► Memory Card Settings

└ Memory Partition Setting :

Sets how storage space on the memory card will be allotted for each recording mode (Entire memory card will be formatted when the memory partition setting is changed)

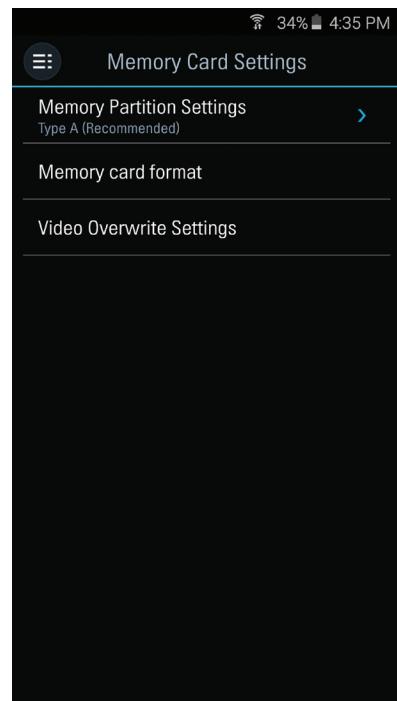
└ Memory card format :

Formats the MicroSD card. Formatting will completely erase all video files stored in the memory card

- ※ It is recommended that you back up data before formatting the memory card. Once you format the memory card, all data will be deleted and cannot be restored. The method for formatting a MicroSD card might vary depending on the computer operating system.

└ Video Overwrite Setting :

Sets the overwriting option which will allow new video files to overwrite oldest video in storage reserved for each mode

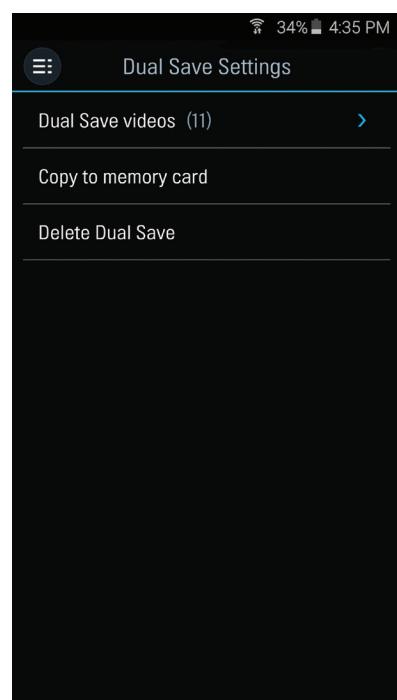


► Dual Save Settings

└ Dual Save Video : Lists Dual Save videos

└ Copy to memory card : Copy all Dual Save videos saved on the internal memory to the MicroSD card

└ Delete Dual Save : Delete all Dual Save videos saved on the internal memory



3-2-4. Settings > Dashcam Setting

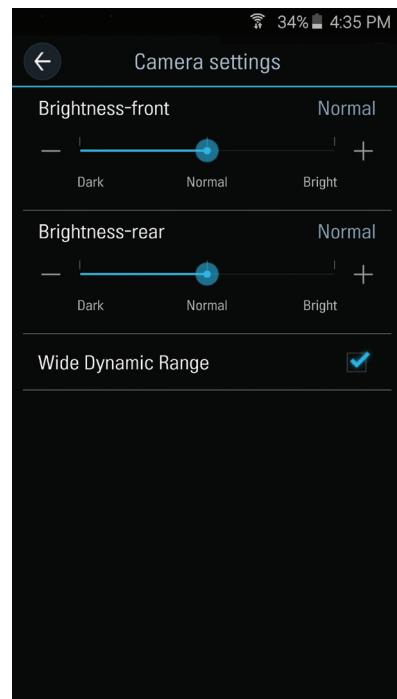
► Camera Settings

└ Brightness-F/R :

Sets the video recording brightness for front/rear camera

└ Wide Dynamic Range :

Sets the WDR mode to record clear video even in extreme contrast/back-lit environment.



► Record Settings

└ Cont. sensitivity :

Sets the impact sensitivity during continuous recording mode. It is recommended that you set the sensitivity according to vehicle type. High sensitivity setting is recommended for cars with softer ride such as luxury sedans; while low sensitivity setting is recommended for cars such as performance cars, trucks, or SUVs which tends to have stiffer suspension settings.

└ Parking Mode :

Monitors vehicle ignition status to automatically convert to parking mode when the vehicle engine is turned off. The dash cam must be hardwired to the vehicle for the use of parking mode.

Parking sensitivity / Motion sensitivity :

Sets the motion detection sensitivity level during Parking mode.
Sets impact sensitivity when using Time Lapse function.

└ Super Night Vision :

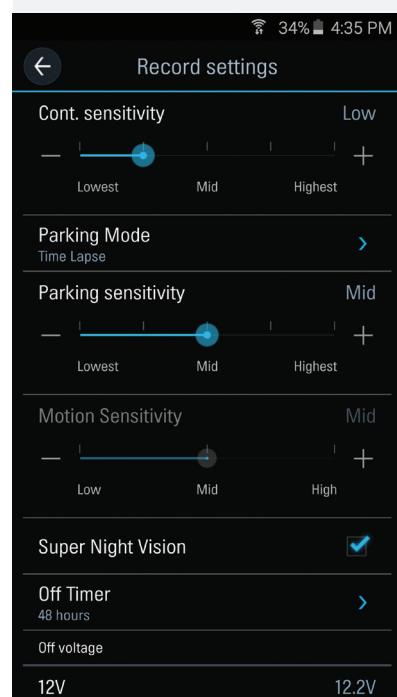
Enhance video exposure for low-light conditions during Parking Surveillance Mode.

└ Device auto-Off Timer :

Sets the timer for the dash cam to automatically shut down in parking mode to prevent from draining the vehicle battery

└ Device auto-Off Voltage :

Sets the voltage level for the dash cam to automatically shut down if the dash cam detects voltage level lower than configured value for more than 5 minutes in order to prevent from draining the vehicle battery



► Road Safety Warning System Settings

└ Safety Camera Alert :

Sets the audible notifications for road safety warnings

└ Vehicle type :

Sets the vehicle type to be used to optimize Advanced Driver Assistance System (ADAS) features such as Lane Departure Warning System (LDWS) and Forward Collision Warning System (FCWS).

└ LDWS (Lane Departure Warning) :

Sets the LDWS driver assistance notification.

Left LDWS sensitivity / Right LDWS sensitivity :

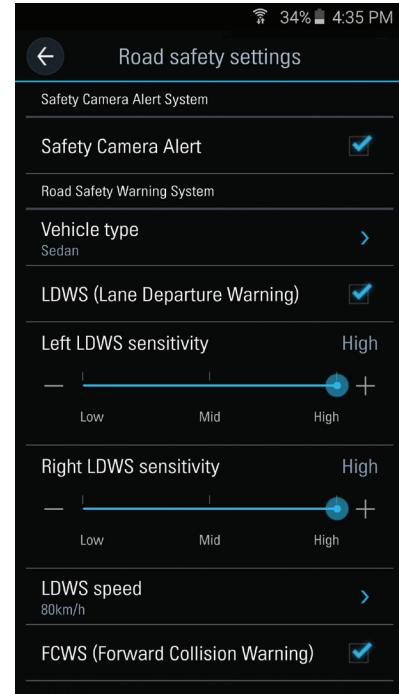
Sets the lane departure detection L/R sensitivity. (It is recommended that the sensitivity is set at high for wider vehicles)

└ LDWS speed :

Sets the speed at which the LDWS notification is enabled. LDWS warning will only be notified to the driver when the vehicle veers off the lane travelling at the configured speed.

└ Forward Collision Warning System (FCWS) :

Sets the FCWS driver assistance notification and Sets the forward collision detection sensitivity .



► System Settings

└ Language : Sets dash cam system language

└ Volume : Sets the volume level

└ Security LED : Sets the pattern for security LED

└ Time zone : Sets the time zone

└ Daylight saving : Sets the daylight saving time

└ Speed unit : Sets the unit for the vehicle speed

└ Speed Stamp : Sets vehicle speed information (tracked by GPS) to be shown or hidden directly on video

