

During continuous recording, the product operates as follows.

Mode	Operation description	Recording LED (REC)
Continuous recording	During driving, videos are recorded in 1 minute segments and stored in the " cont_rec " folder.	 (light on)
Incident continuous recording*	When an impact to the vehicle is detected, a video is recorded for 20 seconds, from 10 seconds before the detection to 10 seconds after the detection, and stored in the " evt_rec " folder.	 (flickers)

* When an impact to the vehicle is detected during continuous recording, incident continuous recording starts with a buzzer sound.



- Wait until the product is completely booted up after turning it on, and then begin operating the vehicle. The video recording does not begin until the product is completely turned on (booted up).
- When incident continuous recording starts, the buzzer sounds as a notification. This function saves you time when checking the status LED to know the operating status of the product.
- To enable recording, you must insert a memory card into the product.

3.4 Recording manually

You can record a scene you want to capture while driving and store it as a separate file.

To start manual recording, press the manual recording () button. Then, manual recording will start with the voice guide. During manual recording, the product operates as follows.

Mode	Operation description	Recording LED (REC)
Manual recording	When you press the manual recording () button, a video will be recorded for 1 minute, from 10 seconds before to 50 seconds after pressing the button, and stored in the " manual_rec " folder.	 (flickers)

3.5 Using parking mode

When the product is connected to the vehicle via the hardwiring cable (optional), the operating mode is switched to parking mode with the voice guide after the engine or electrical accessories are turned off.



- Parking mode operates only when the hardwiring cable is connected. The hardwiring cable (optional) must be professionally installed to the vehicle by a trained mechanic.
- To use all recording modes, you must insert a memory card into the product.
- Depending on the battery charging status of the vehicle, the duration of parking mode may differ. If you want to use parking mode for an extended period, check the battery level to prevent battery depletion.

If you do not want to use parking mode or you want to change the mode settings, from the mobile viewer, tap **Dash Cam Settings > Record Settings**.

Refer to the following table to set the **Parking Mode** options.

Option		Operation description	Recording LED (REC)
Motion Detection	No motion or impact detected	Monitors movement in the area or impacts to the vehicle. Video will be recorded only when motion or an impact is detected.	 (light on)
	Motion detected	When a moving objects is detected while parking, a video is recorded for 20 seconds, from 10 seconds before detection to 10 seconds after detection, and stored in the " motion_timelapse_rec " folder.	 (flickers)
	Impact detected	When an impact is detected while parking, a video is recorded for 20 seconds, from the moment 10 seconds before detection to 10 seconds after detection, and stored in the " parking_rec " folder.	 (flickers)
Time Lapse	No impact detected	A videos is recorded at a rate of 2 fps for 10 minutes, compressed into a 2-minute long file, and stored in the " motion_timelapse_rec " folder. Since the video file recorded with this option is small, you can record a long video.	 (light on)
	Impact detected	When an impact is detected while parking, a video is recorded for 100 seconds at a rate of 2 fps, from the moment 50 seconds before detection to 50 seconds after detection, and stored in the " parking_rec " folder after being compressed into a 20-second long file. (The buzzer will sound.)	 (flickers)
Energy Saving	No impact detected	Monitors impacts to the vehicle. Video will be recorded only when an impact is detected.	 (light on)
	Impact detected	When an impact is detected while parking, a video is recorded for 20 seconds from within 1 second after detection and stored in the " parking_rec " folder.	 (flickers)
OFF		The product is powered off when electric accessories and the engine are turned off.	Off



You cannot use Motion Detection, Time Lapse, or Energy Saving at the same time.



If parking mode settings are changed, the videos recorded with the previous settings will be deleted. To prevent data loss, back up all parking mode videos before changing parking mode settings.

4. Using the mobile viewer

You can view and manage recorded videos and configure various product features on your smartphone.



One of the following environments is required to use the **THINKWARE CLOUD** application:

- Android 4.4 (KitKat) or higher
- iOS 8.0 or higher

4.1 Connect the product to a smartphone

4.1.1 Connecting the product to an Android device

- 1 On your Android device, open the Play Store, and download and install **THINKWARE CLOUD**.
- 2 Run **THINKWARE CLOUD**.
- 3 Tap **Dash cam connection is required.** at the bottom of the screen and follow the on-screen instructions to connect the product to an Android device.



The Wi-Fi password is required when you connect the product to a smartphone for the first time. Enter “123456789” in the password input field.

4.1.2 Connecting the product to an iOS device

Connecting via Wi-Fi

- 1 On your iOS device, open the App Store, and download and install **THINKWARE CLOUD**.
- 2 Run **THINKWARE CLOUD**.
- 3 Tap **Dash cam connection is required.** at the bottom of the screen.
- 4 Tap **Wi-Fi Connection**.
- 5 On the product, press the Wi-Fi () button.
- 6 From the **THINKWARE CLOUD**, tap **Next**.
- 7 From the network list, select the Wi-Fi network starting with "Thinkware."
- 8 Enter "123456789" in the **Password** field, and tap **Join**.

The product is connected to your iOS device via Wi-Fi.

Connecting via hotspot

1 On your iOS device, open the App Store, and download and install **THINKWARE CLOUD**.

2 Run **THINKWARE CLOUD**.

3 Tap **Dash cam connection is required.** at the bottom of the screen.

4 Tap **Hotspot Connection > Configure New Connection.**

5 On the product, press the Wi-Fi () button.

6 From the **THINKWARE CLOUD**, tap **Next**.

The Wi-Fi Settings screen will appear.

7 From the network list, select the Wi-Fi network starting with "Thinkware."

8 Enter "123456789" in the **Password** field, and tap **Join**.

The product is connected to your iOS device via Wi-Fi.

9 Return to the **THINKWARE CLOUD**, enter the password for your hotspot, and tap **Next**.



• To view the password for your hotspot, from the home screen of your iOS device, tap **Settings > Personal Hotspot**.

10 Tap **Turn On Hotspot**.

11 Confirm the pop-up message and tap **OK**.

12 Turn on the **Personal Hotspot** and wait until you hear "**Connected to the Internet**."



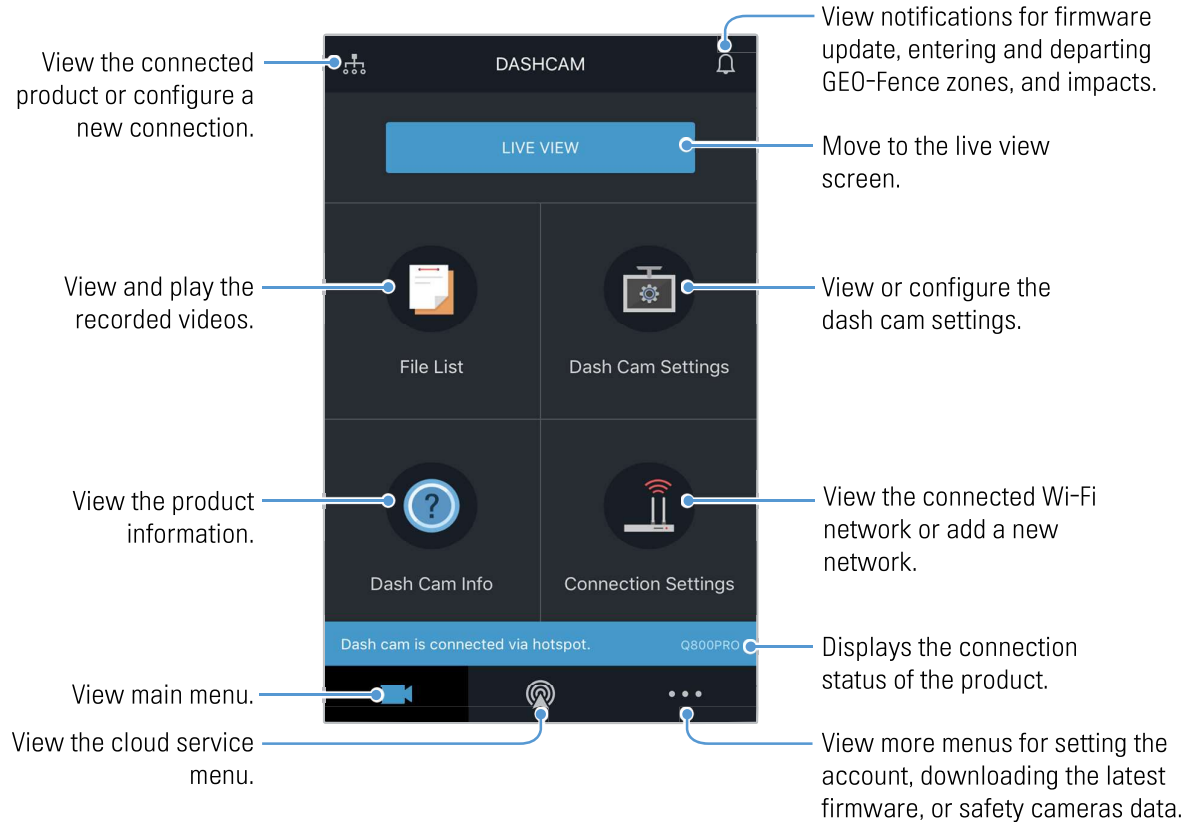
Do not leave the personal hotspot settings screen. Connection is not completed if you leave the personal hotspot settings screen before you hear "**Connected to the Internet**."

13 Return to the **THINKWARE CLOUD**.

The product is connected to your iOS device via hotspot.

4.2 Mobile viewer screen layout

The following provides brief information about the mobile viewer's screen layout.



4.3 Playing recorded videos on the mobile viewer

Follow the instructions to play recorded videos.



The recording and the Advanced Driver Assistance System (ADAS) features of the product are disabled while checking the video file list or playing a video on the mobile viewer.

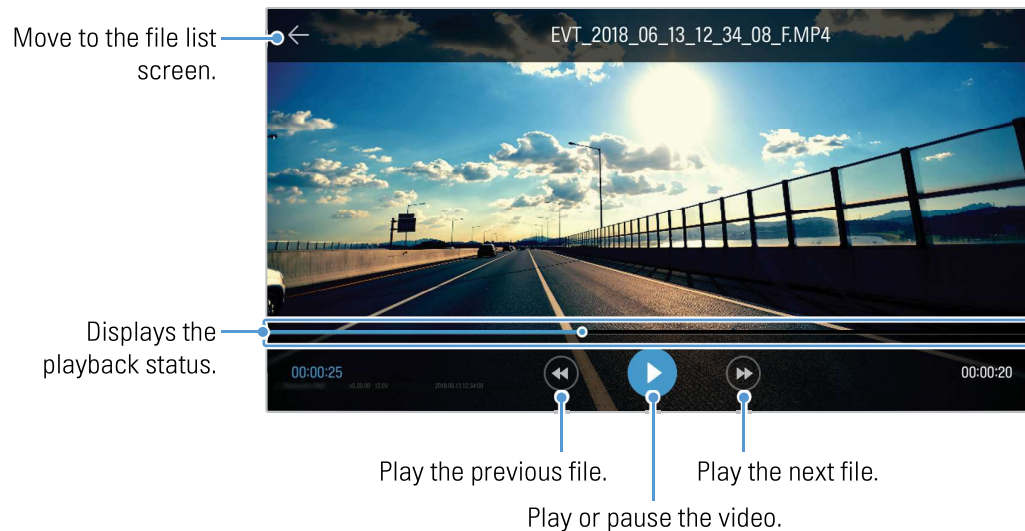
- 1 On your smartphone, run the Thinkware Cloud application and connect the product to the smartphone.
- 2 From the home screen of the mobile viewer, tap **File List**. The categories will be displayed.
- 3 Tap the desired category. The video file list will appear.
- 4 If necessary, tap **All**, **Front**, or **Rear** to filter the video file list by camera.
- 5 Select the desired video.

4.4 Video control menu overview

The following provides brief information about the mobile viewer's video control menu.



The recording and the Advanced Driver Assistance System (ADAS) features of the product are disabled while checking the video file list or playing a video on the mobile viewer.



4.5 Cloud service

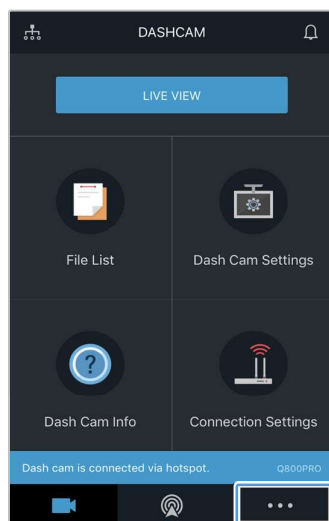
As long as the dash cam is connected to Internet, you can view your vehicle's location, receive notifications when entering and departing Geo-Fence zones, and detecting a strong impact.

4.5.1 Log in to the THINKWARE account

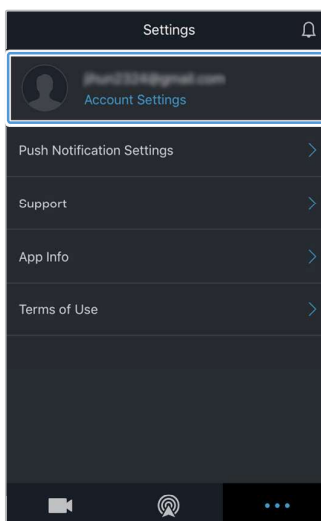
Follow the instructions to log in to the THINKWARE account.



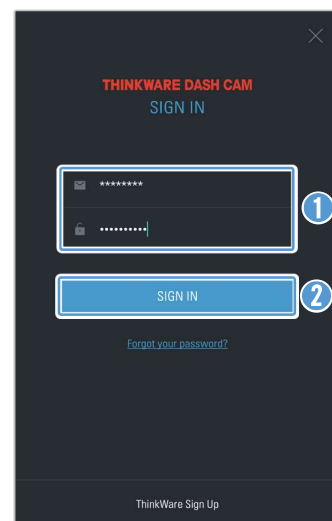
- You must turn on the network function to use the cloud service. To turn on the network function, refer to "6.6.1 Setting the network function" on page 50.
- You must log in to the THINKWARE account to use the cloud service. If you do not have an ID, select **ThinkWare Sign Up** on the **SIGN IN** screen, and create an account first.
- Once you log in to the THINKWARE account and register your product to your account, you can use cloud service even if your product is connected to Internet via Wi-Fi or others' mobile phone.



Tap .



Tap **SIGN IN**.

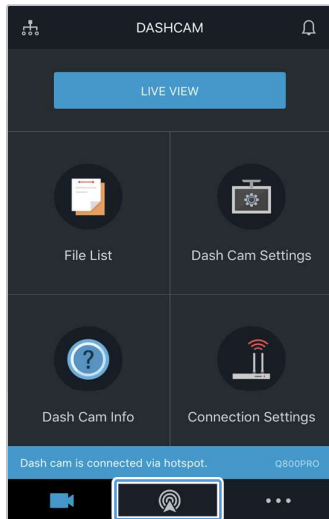


1 Enter your ID and the password.

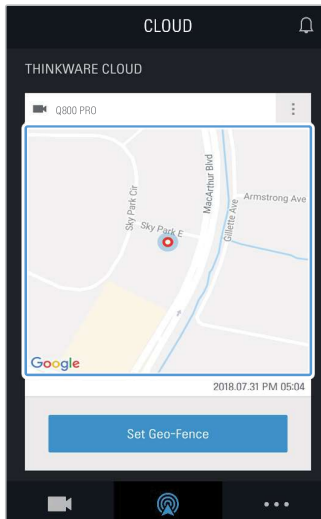
2 Tap **SIGN IN**.

4.5.2 Locating the vehicle

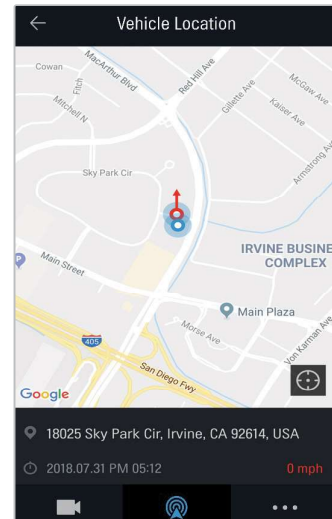
The cloud service receives GPS information from your product and displays the location of your vehicle. Follow the instructions to locate your vehicle.



Tap .



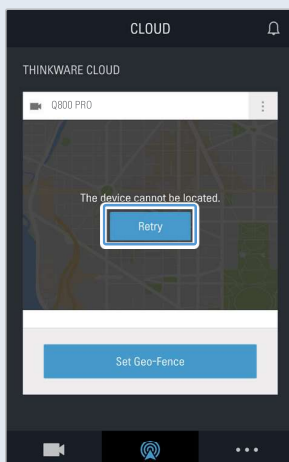
Your mobile phone's location is marked on the map.
Tap the map to confirm your vehicle's location on the map.



Your vehicle's location and direction is marked on the map.
The last GPS information reception date and time are also displayed.



If the cloud service failed to receive GPS information from the product or if you are using the cloud service for the first time, the following screen appears. Tap **Retry** to attempt to receive GPS information again.

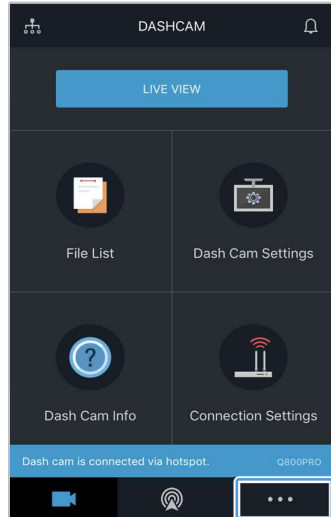


4.5.3 Setting Geo-Fence

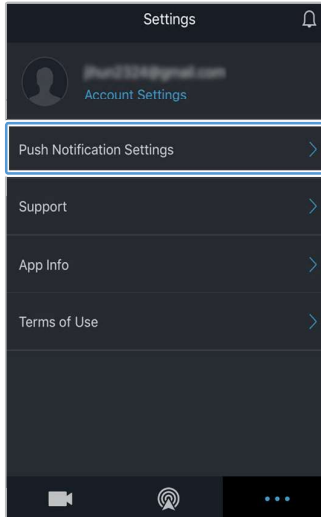
You can receive notifications when your vehicle enters to or departs from the Geo-Fence zones.

Turning on the Geo-Fence notification

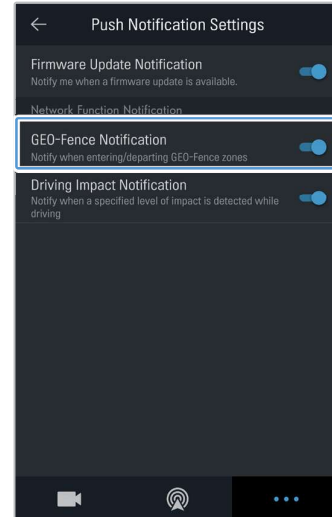
Follow the instructions to turn on the Geo-Fence notification.



Tap .



Tap Push Notification Settings.



Tap GEO-Fence Notification.