

Quick Start Guide

AVC422

Amber Vision C422

Dual 4G Telematics HD Dashcam

1
*Install
Your device*

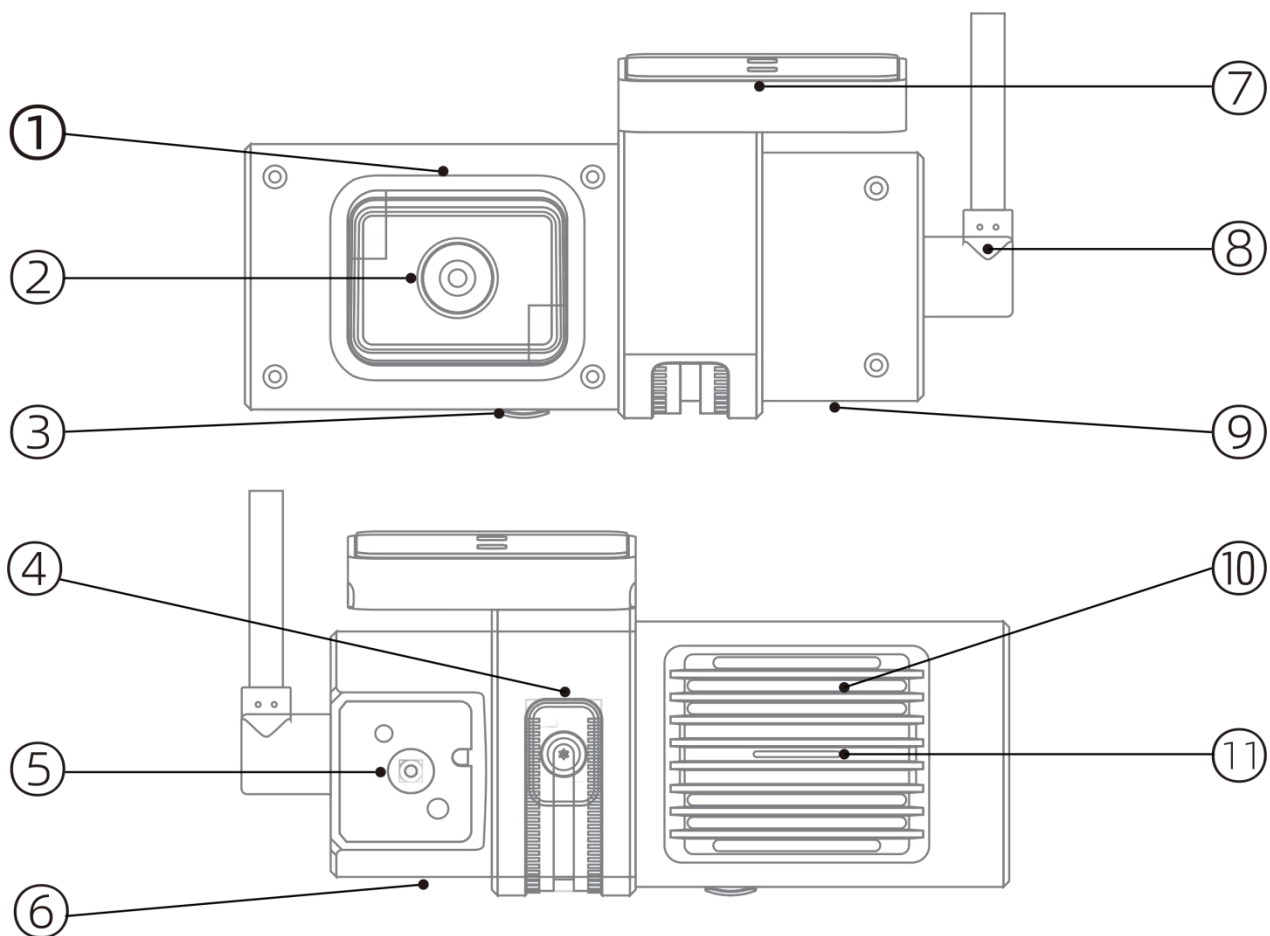
2
*Download
Amber Connect
App*

3
*Activate
the device*



Overview of Product Appearance

Appearance Description



Item	Function
1	Memory card / SIM card slot
2	Front camera (main)
3	SOS Key
4	Fastener screw
5	Sub camera
6	Status indicator light (red, green, blue)
7	Mount base
8	Power supply port
9	Microphone
10	Heat sink
11	Speaker
12	Upgrade/reset button

Description of Work Indicators

Red	Off	○○○○○	The device is shut down or in sleep mode.
	Solid on	●●●●●	The device is in the ACC on state and records video normally.
	Flash	●○●○●○●	The device is in the ACC ON state but an exception occurs in the video recording function.
Green	Off	○○○○○	The device is shut down or in sleep mode.
	Solid on	●●●●●	The device is in the ACC ON state and has successfully got its first fix.
	Flash	●○●○●○●	The device is in the ACC ON state and is positioning.
Blue	Off	○○○○○	The device is shut down or in sleep mode.
	Solid on	●●●●●	The device is in the ACC ON state and has normal network access.
	Flash	●○●○●○●	The device is in the ACC ON state and fails to access the network.

Packaging List

Standard configuration

Item	Name	Quantity
1	AVC422	x 1
2	Mount base	x 1
3	Card slot protective cover	x 1
4	Power cable	x 1
5	T6 torx screwdriver	x 1
6	M2	x 3

Optional accessories

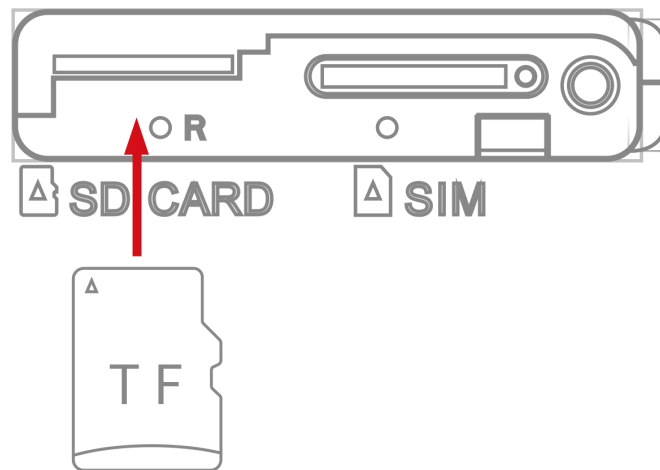
Item	Name	Usage
1	Power cable (for cigarette lighter socket)	It is used by the device to get power from the vehicles cigarette lighter socket.
2	Power cable (for OBD port)	It is used by the device to get power from the vehicles OBD port.
3	Peripheral camera	It can be mounted remotely to monitor places of your interest.

Selection of accessories

The AVC422 series requires a SIM card and a memory card to function its best. You can purchase the two accessories according to your specific needs, but the following requirements must be met:

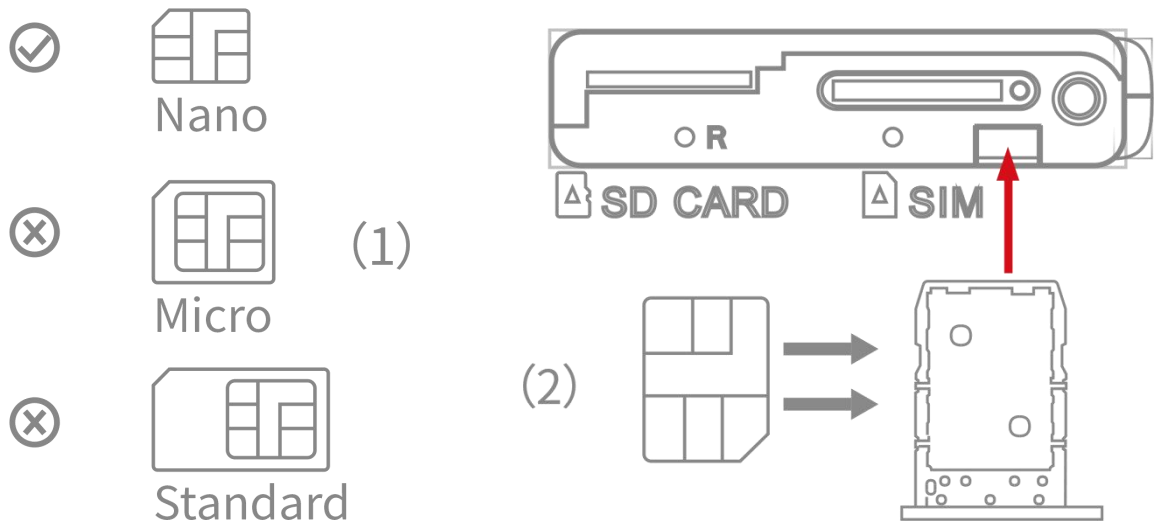
Memory card

- The device supports one Micro SD card;
- The card must be in FAT32 format with a capacity of 16GB to 128GB;
- The card must be rated Class 10 or higher, or perform A1 or higher;
- It is recommended to use a memory card from the original manufacturer of your device to ensure optimal compatibility and stability;
- Insert the card by the direction shown in the figure to protect the card against damage;
- Press the card inward to remove it. If you are removing the card in your car, use moderate force to ensure that the card is not ejected out to an inaccessible location;
- Make sure the SIM card is not inserted into the memory card slot;
- Memory cards are consumables, which means they have a tested lifespan.
- It is recommended that you test the card quarterly to ensure that it is reading and writing normally, and replace it periodically to protect your video files from loss;
- It is recommended to use industrial grade memory cards if the device is used for a long period of time every day to avoid video recording exceptions caused by hot weather.



SIM card

- A Nano SIM card is required (refer to the following figure for card size);
- Use the supplied card tray for the SIM card installation;
- Attach or detach the SIM card (make sure the device is in the ACC OFF state) by the steps shown in Figure 2;
- Make sure the SIM card is subscribed to a cellular data service;
- Use the supplied ejector pin to remove the card tray and the SIM card;
- It is recommended to use ceramic SIM cards if the device is used for a long period of time every day to avoid card deformation and communication failures caused by high temperature.



Product Functions

AVC422 series is a compact 4G dashcam. It has two cameras that simultaneously monitor the road ahead and the cabin. It uses the 4G network to communicate with the backend, pinpoints locations using GPS and BDS signals, and detects movements of the vehicle using the G-sensor. It can be widely used in light vehicle fleets and private cars, enabling remote management of both vehicles and drivers to save time and improve efficiency.

Product Functions

- **Video recording**

The two cameras can simultaneously record video of the road and the driver. The device supports loop recording and stores video in segments. It also supports video playback via the web browser or the mobile app.

- **Tracking**

The device is equipped with a GNSS module that determines positions using both GPS and BDS signals. It is able to acquire positions when the vehicle is moving and upload the data to the cloud server in real-time. It also supports the playback and retrieval of trip history.

- **4G communication**

The built-in 4G LTE module can access the network at CAT.1 speed, ensuring smooth video transmission.

- **Remote management**

The device can connect to the cloud server over the wireless data network, enabling remote control of the device, such as location tracking and live video viewing.

- **Driving behavior monitoring**

The device can detect reckless driving behaviors such as collisions, hard braking, hard acceleration, sharp cornering, and speeding, and report such behaviors to the platform.

- **Exception alerts**

When the device detects exceptions in the vehicle, it notifies the platform, records the location, and captures video clips related to the exception. The device then uploads these data to the cloud server for storage and future reference.

Configuration and parameters

Configuration	Parameter
Communication Network	4G Cat.1
Speaker	Support
Front camera (main)	1920 × 1080
GNSS	GPS & BDS
WiFi	2.4G 802.11 b/g/n AP mode (no WiFi hotspot)
Frequency bands (vary with the model you purchase)	AVC422-E: 4G FDD: B1/B3/B5/B7/B8/B20/B28 4G TDD: B38/B40/B41 2G GSM: B2/B3/B5/B8
	AVC422-LA: 4G FDD: B1/B2/B3/B4/B5/B7/B8/B28 2G GSM: B2/B3/B5/B8
CPU	ARM Cortex A7
Microphone	Microphone
Sub camera	640 × 360
G-sensor	3-axis
Memory card	Micro SD card in FAT32 16GB–128GB

Product performance

Configuration	Parameter	Performance	Parameter
Operating voltage	DC9-33V	Under voltage protection	9V
Operating temperature	-20°C to 70°C	Over voltage protection	36V
Storage temperature	-30°C to 85°C	Reverse connection protection	Support
ESD protection	Air ±8KV; contact ±4KV	Flame retardant	UL94 V-0

Product Installation

Notices

- This device is for use with gasoline-powered vehicles only. Please do not use it with all-electric or hybrid vehicles;
- Use the supplied accessories for the installation;
- The power supply for the device is DC9-33V. Please connect the positive and negative terminals of the power cable correctly to prevent any damage to the vehicle;
- When installation is complete, remove the protective film from the camera lens for optimal capture effect;
- Use a memory card and a SIM card recommended in this guide;
- Ask your dealer or a professional agency to perform the installation and testing as described in this guide.

Installation preparation

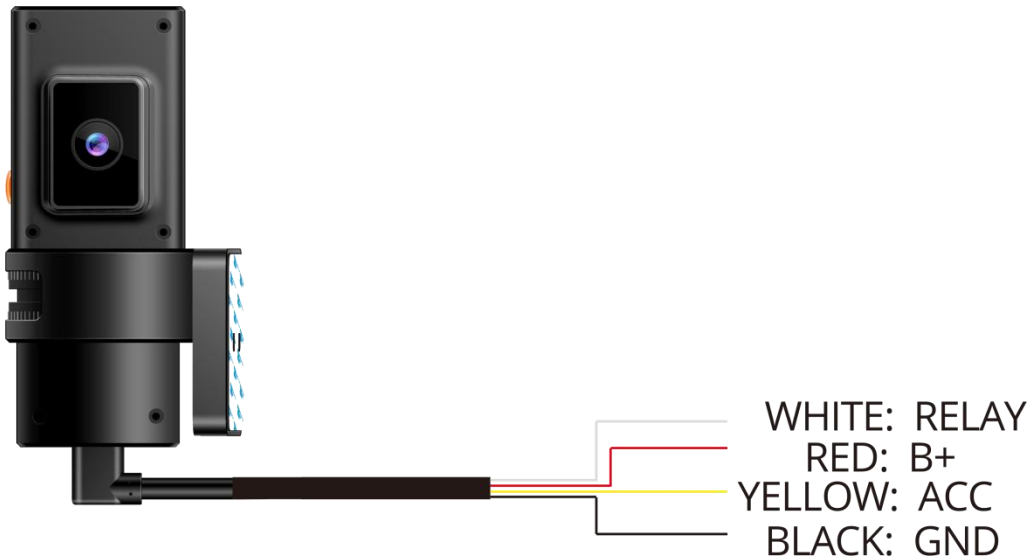
- Check the package you received against the packing list and make sure everything is in good condition before installing.
- Prepare the installation tools (insulation tape, assembly and disassembly tool, etc.)
- Check if all original functions of the vehicle in which the device is to be installed are normal. If any exception is found, do not proceed with the installation;
- Take necessary cleaning and protection measures to the vehicle in advance.

Product pre-installation

Before installation, it is recommended that you install all necessary accessories on the device including:

- Insert an eligible memory card correctly into the device;
- Place an eligible SIM card in the card tray and insert it into the device;
- Select a proper install position and clean the position.

Product wiring diagram

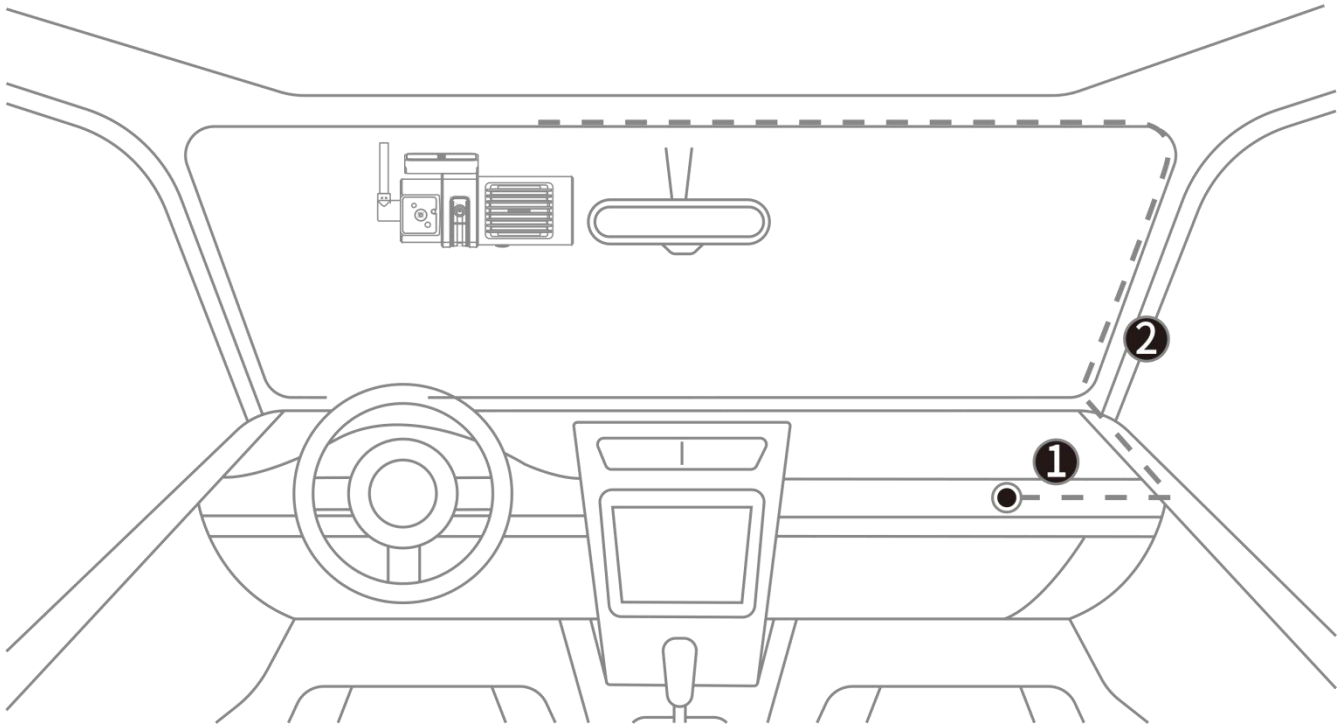


Installation description

- Check if all accessories are included and intact and purchase optional accessories according to your specific needs;
- If you plan to install a peripheral camera, it is recommended that you purchase a camera specified by the manufacturer;
- If you plan to install a relay, a compatible relay kit should be purchased separately;
- When the power cable is connected, tighten the fastener screw to prevent the cable from coming loose.

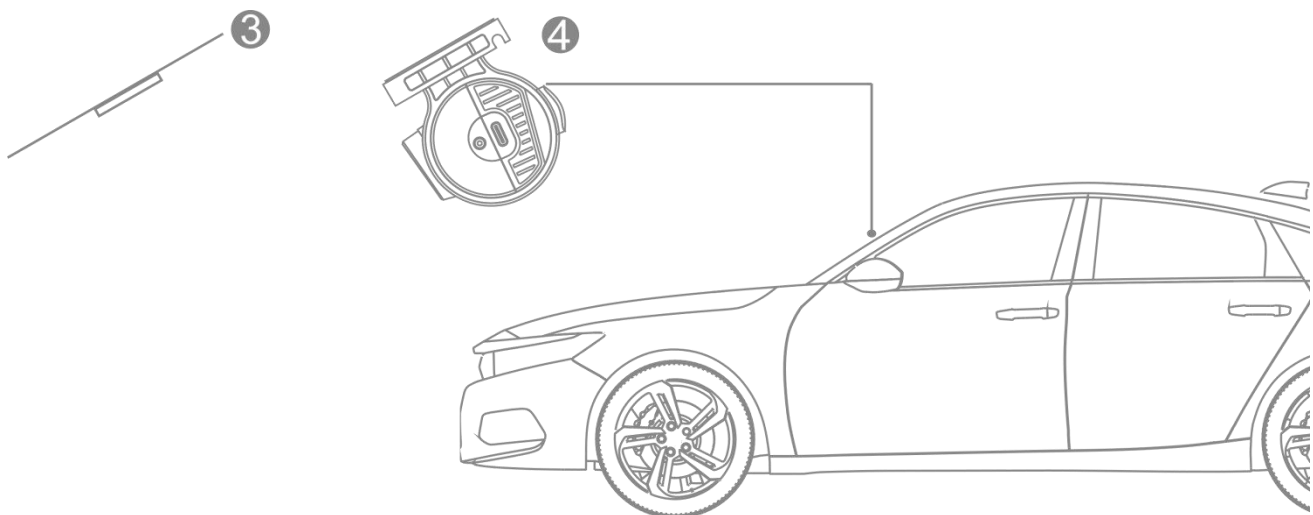
Installation

It is recommended that you install the main unit on a position on the front windshield that is to the left side behind the rearview mirror. The entire installation consists of the installation of the body and the routing of the power cable.



Step 1: Connect the power cable of the device with the B+, ACC, and GND wires from the vehicle fuse box. Refer to Figure ① for the location.

Step 2: Route the power cable along the A-pillar to the top center of the front windshield. Refer to the dotted line in Figure ②.



Step 3: Attach the mount base

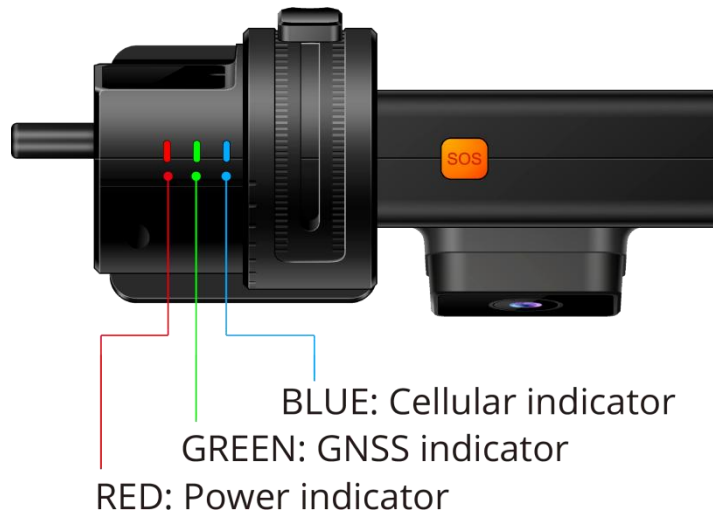
Select a suitable position on the front windshield. The recommended position is one that is to the left side behind the rearview mirror (near the driver's seat); Clean the mounting position to ensure there is no dust or smudges; Remove the protective film from the 3M double-sided adhesive tape on the mount base and attach the base to the mounting position, as shown in Figure ③.

After attaching the base, apply a moderate amount of force to enhance the contact and squeeze out the air to ensure that the mount base stays in place without falling.

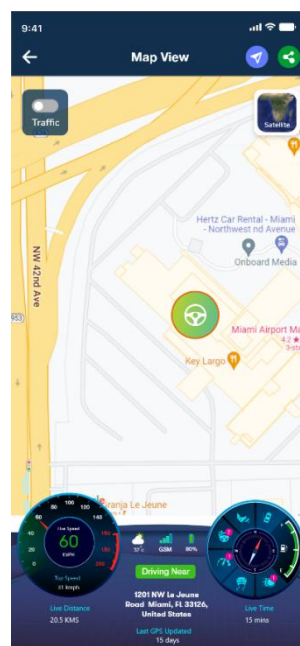
Step 4: Mount the device on the base and adjust the front camera so that it is facing forward horizontally, as shown in Figure ④. Tighten the adjustment screw of the base and connect the power cable to complete the installation.

Device testing

- Check the power cable connection: Normally, when the vehicle is in the ACC ON state, the power indicator (red) of the device will light on; otherwise, the power indicator will be off.
- Check the GNSS function of the device: Normally, when the vehicle's ignition is turned to the ON position, the GNSS indicator (green) will flash; you can drive your vehicle to an open area and wait for one minute, then the GNSS indicator will change to solid on.



- Check the data communication function of the device: Normally, when the vehicle's ignition is turned to the ON position, the cellular indicator (blue) will flash; you can drive your vehicle to a place where the cellular signals are good, then the cellular indicator will change to solid on.
- Check the cameras: Log in to the designated mobile app and go to the live video interface. If you can switch between cameras, then the cameras are working properly. You can manually adjust the capture angle of the cameras according to actual conditions.



Main Functions

Basic operation

- **Startup**

If the device's power cable is properly connected to the vehicle's power source, the device will start automatically when the vehicle is started without human intervention.

- **Shutdown**

The device shuts down automatically if the power source to it is disconnected.

- **Sleep**

The device will disable its recording, GNSS, and other functions if it detects that the vehicle's ignition is turned to the OFF position. Then it will enter the sleep mode to save power.

Main functions

- **Video recording**

When the vehicle's ignition is turned to the ON position, the device will start recording automatically. It will simultaneously record video, including audio, captured by the connected camera(s). This function can make use of loop recording to store video on the memory card, without human intervention.

- **Tracking**

When the vehicle's ignition is turned to the ON position, the device will automatically activate its GNSS module to fix positions. This function enables the device to track and acquire the geographic location of the vehicle, which is uploaded to the cloud server.

- **Event monitoring**

When in operation, the device can monitor the vehicle speed, gravity acceleration, driver and vehicle status, etc.; when an abnormal condition occurs, the device issues an alert to remind the driver and uploads the event with geographic location and image/video evidence to the platform.

Remote Management

- **Live video**

Through the background service you can use the device's cellular capability to transmit audio and video from the camera(s), so you can view the vehicle's status live.

- **History video**

Through the background service you can use the device's cellular capability to push the selected audio and video files as well as the history video files stored in the memory card to the platform.

- **Location query**


You can check the live or history locations of the vehicle via the platform to know its past trips.



Need help? Contact 24/7 live support!

 In App Chat

 support@amberconnect.com

 Chat via website www.amberconnect.com

Works with Android phones and tablets, iPhone, iPad.
Compatible with Chrome, Mac and PC web browsers.



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