![Amber Connect logo] **amber connect**
Experience Telematics AI

Quick Start Guide

AVC420
Amber Vision C420
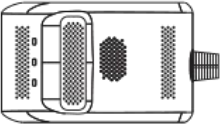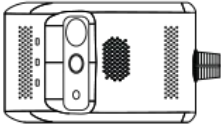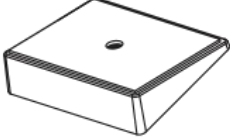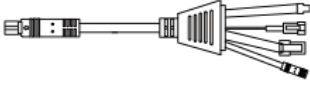Dual AI 4G Telematics HD Dashcam

Install Your device
1
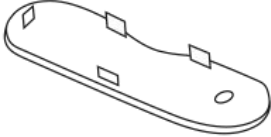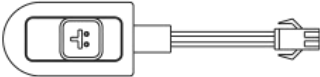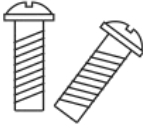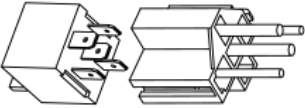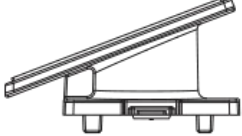
Download Amber Connect App
2

Activate the device
3

Introduction

Packing List

Standard		
AVC425	AVC420	Bracket (for sedans)
Power bundle	Tamper cover	External SOS key
Philips screwdriver	Screws	Relay

Opcional		
Tamper lock	Bracket (for heavy-duty trucks)	Bracket (for medium-duty trucks)
Simple Version Power Cable		

Please check the product model you purchased carefully as the packing list varies with the model.

Overview

- AVC420 series uses 4G network for communication. For these dual-channel digital video recorders (DVRs), except to be able to record simultaneously, the two cameras can also record locally and live stream remotely at the same time. A number of safety features are included in the system, including DMS, ADAS, exception alerts, and more.
- Furthermore, the 4G capability of the device enables seamless video streaming, live audio alerts, rapid data upload, route replay, and video history playback. With all of these features, fleet managers can coach drivers based on data and improve operations to unlock more benefits, whether they're managing government, logistics, ride-hailing, or taxi fleets.

Appearance and LEDs
Main Unit

Power ——— ●

GPS ——— ●

GSM ——— ●

Front camera 1080P
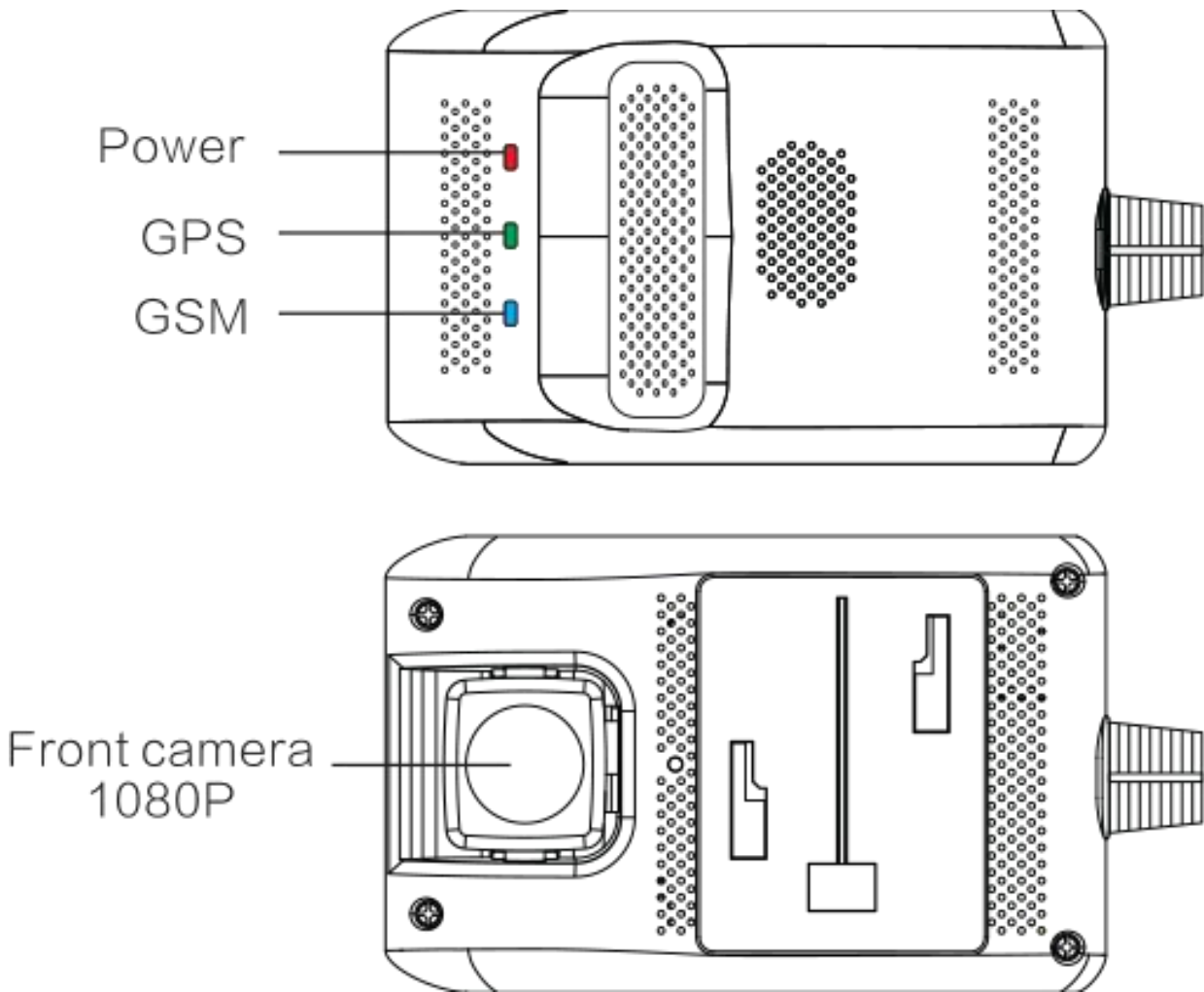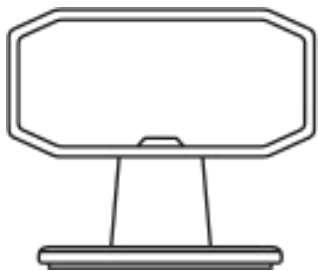
Product Model: **AVC425/AVC420 main unit**
Camera: 1920x1080/25FPS/F 2.2/Full color

Subcamera Options

Product Model	AVC420	Integrated Version
Camera	1280x720/15FPS/F2.5/Full color in daytime and monochrome in dim light No remote camera	
Usage	Monitor the cabin	Inward camera

Product Model	AVC425	DMS Version
Camera	1280x720/15FPS/F2.0/Full color in daytime and monochrome in dim light	
Usage	Monitor the cabin	

Product Model	AVC425	DMS Version
Camera	1280x720/10FPS/monochrome all day	
Usage	Monitor the Driver	

Refer to the specifications and features of the product model you purchased. If you have any questions, please contact your supplier.

LEDs

LED	Color	Connotation	Status
Power	Red	Solid on	Device powered on (ACC ON)
		On for 0.5s and off for 10s	Device in sleep mode
		On for 1s and off for 1s	No TF card detected or TF card damaged
		OFF	No power connected
Network	Blue	Solid on	Connection to server succeeded

		On for 5s and off for 1s	GSM and GPRS networks are available, but connection to server failed
		On for 1s and off for 1s	Only GSM network is available
		Off	GSM network is unavailable
GNSS	Green	Solid on	Location succeeded
		On for 1s and off for 1s	Device is locating/location failed

Wirings
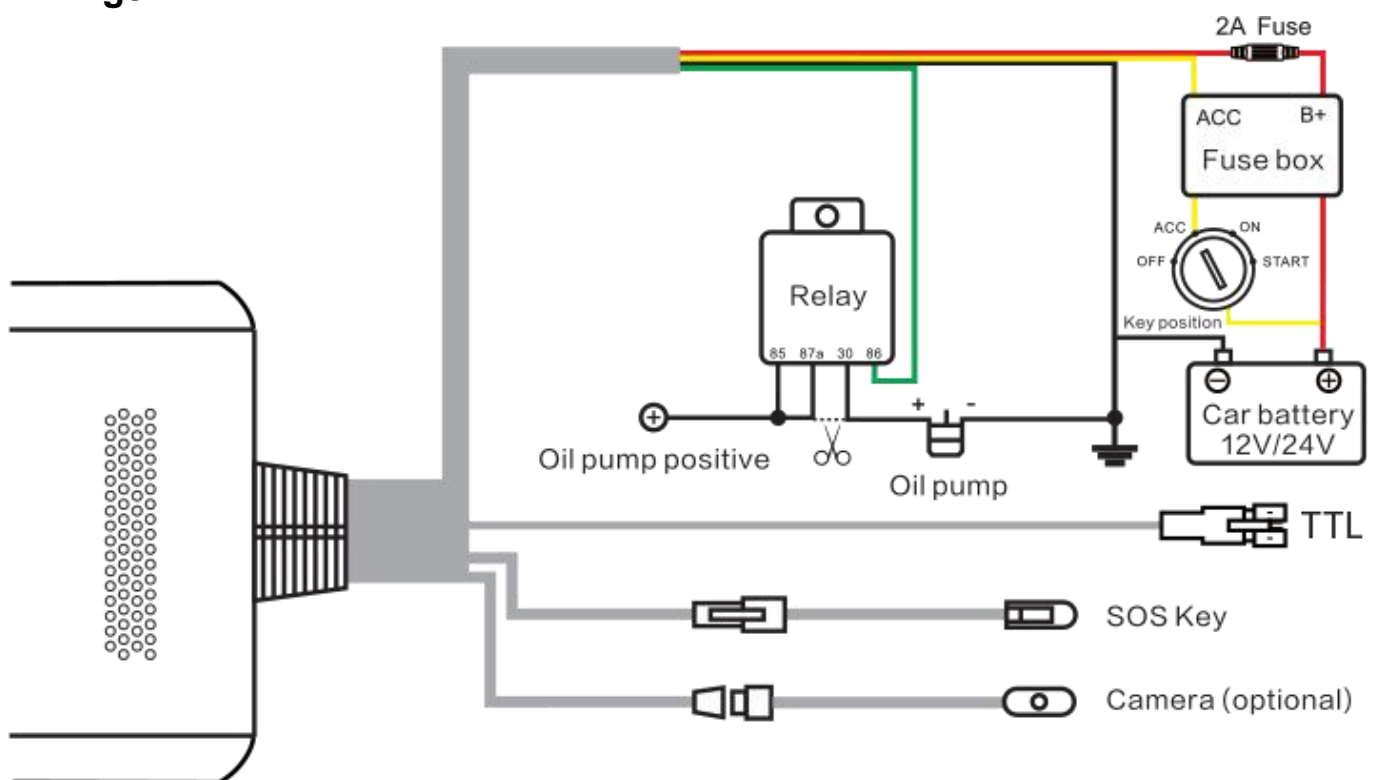
Cable	Definition	Color	Usage
Power	B+	Red	To battery positive (9-30V), power input
	GND	Black	To battery negative, power input
	ACC	Yellow	To ACC ON/Positive {9~30V), power input
	Relay	Green	To relay for remote power and fuel cutoff
TTL(optional)	I/O	/	To peripherals, such as oil sensor, card reader, etc.
SOS	SOS	SOS	To the external SOS key .
Camera (optional)	Remote camera	/	Monitor the cabin AVC420 can not use this wire

Specifications and Features

Specifications

Category	Item	Parameter	Remarks
Hardware	Memory	1GB+16GB	/
	AVC420-E	4G	FDD:B1/B3/B5/B7/B8/B9/B20 IDD:B38/B39/B40/B41(100M)
		3G	WCDMA: B1/B2/B5/B8
		2G	GSM: 850/900/1800/1900
	AVC420-LA	4G	FDD: B2/B3/B4/B5/B7/B12/B17 IDD: B38/B41(100M)
		3G	WCDMA: B2/B4/B5
		2G	GSM: 850/1800/1900
	WiFi	2.4 GHz	802.11/b/g/n
	GNSS	Support	GPS/BDS
	Microphone	Support	For remote voice communication
	Speaker	Support	To notify drivers of status or events
Interface/Key	Reset key	Support	On the main unit
	Interface	Micro USB	For commissioning and upgrade
Others	Power supply	Fuse Box	B+/ACC/GND
	Supply voltage	DC 9-30V	/
	Operating temperature	-20°c ~+65°c	/

Features

No	Feature	Description
1.	Video recording	This enables the device to record in loop when the vehicle is moving.
2.	Live video	This enables the device to live stream images captured by cameras via the LTE network to the platform (web or app).
3.	Tracking	This enables the device to upload location data and motion information via the mobile network to the platform for analysis.
4.	Event alert	This enables the device to upload alert messages and video files to the platform when an event is triggered by collision, vibration, dangerous driving behavior, emergency, OMS reminder, speeding, etc.
5	SOS call	This enables the driver to notify the platform at the earliest time possible, make a call, and activate video recording when an emergency occurs.
6	Remote control	This enables the user to deliver a lock command to the device via the platform (web or app) to remotely cut off the fuel and power to the vehicle when an exception occurs.

Installation

Precautions:

- This device is not suitable for battery electric vehicles (BEVs) and hybrid electric vehicles (HEVs).
- Use accessories specified by the manufacturer only.
- The standard supply for the device is DC9~30V, please use the original power cable and ensure that 1he positive and negative ends are correctly wired.
- Remove the protective film on the remote camera before installation.
- It is recommended to ask a distributor, a designated business, or an expert to do the installation and commissioning.
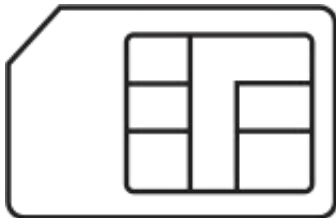
Preparation

Device check

Check visually whether the device is in good condition and whether the relevant accessories are complete.
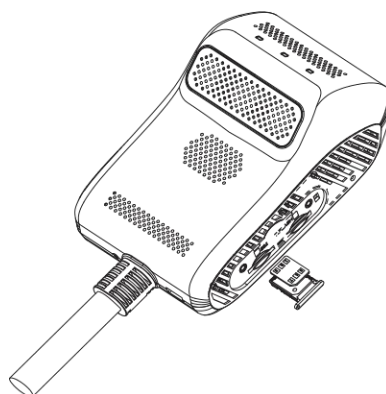
SIM Card Attachment

Ensure that the device is ACC OFF before attaching a proper SIM card. In addition, the SIM should have data service activated and not in arrears.
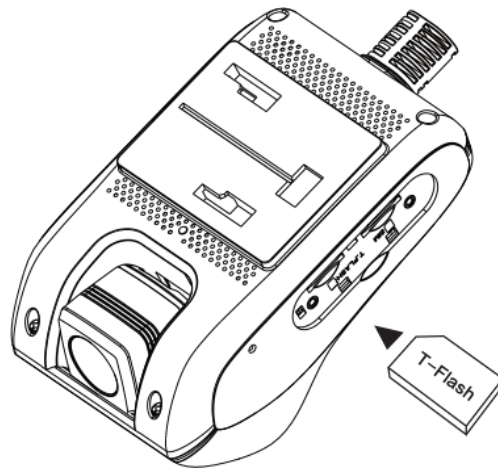

Micro   Nano

TF Card Attachment

Ensure that the device is ACC OFF before attaching a proper TF card.

Note:

- **Use a TF card in speed class 10 or higher and with a capacity of 32GB or above.**
- **The TF card is recommended to change every half a year to ensure the recording performance of the device.**
- **Mount the tamper cover after the attachment. Fit the TF card in the correct slot.**

Main Unit Installation
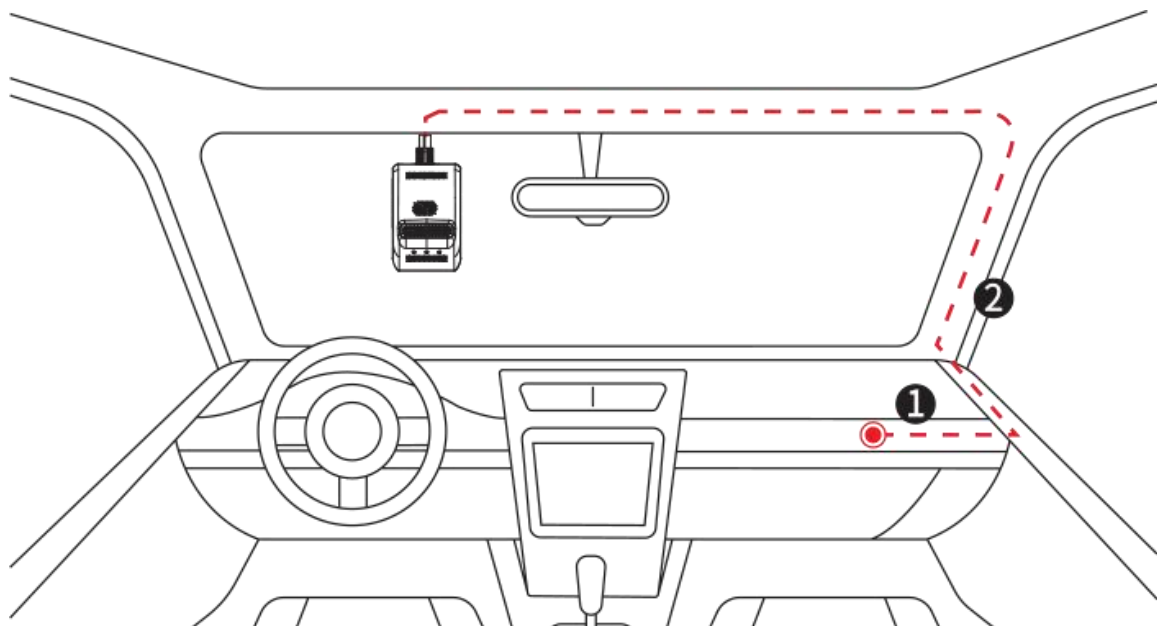
- Connect the power cable of the device to B+, ACC, and GND of the fuse box on the vehicle. ❶ is a reference position.

- Route the power cable along the A pillar of the vehicle to the upper center of the front windshield. The red dashed line (❷) in the figure is for reference.
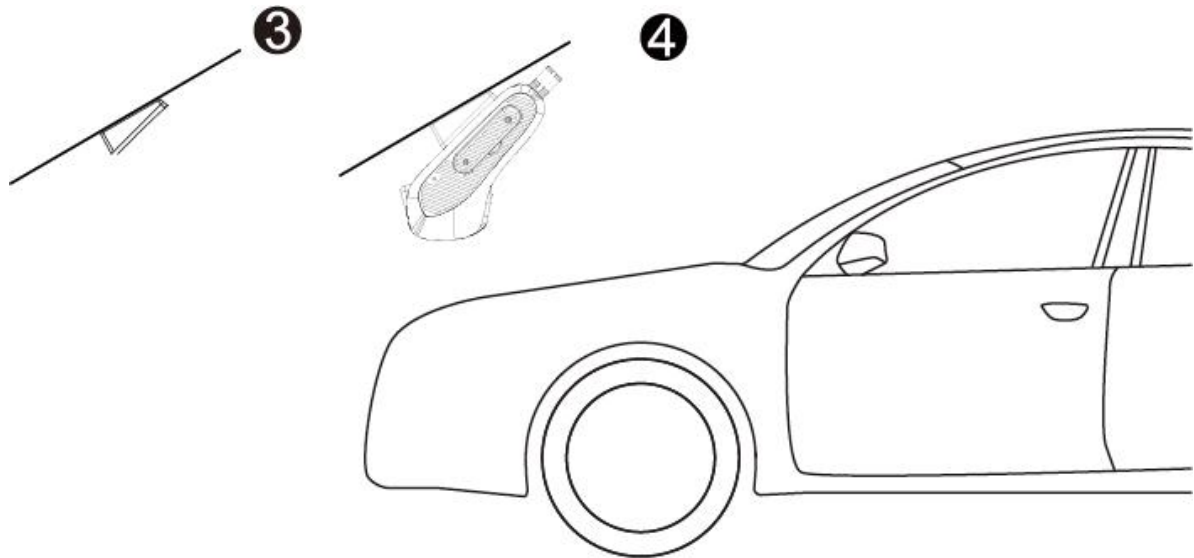
- Select a proper installation position and wipe the position clean. Remove the protective film from the 3M tape of the mounting base and attach it to the position. Wait for 2 hours before proceeding to the next step. See ❸ for reference.
- Mount the device to the base and connect its power cable correctly (see ❹ for reference).Then fasten the cable securely.

Installation of Accessories

You can select a proper position to install the remote camera according to actual conditions
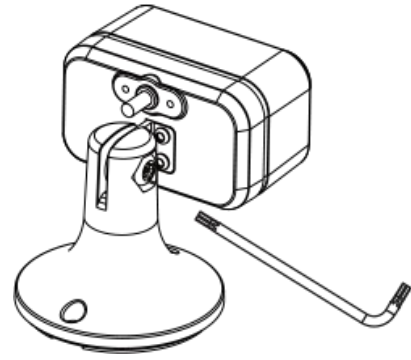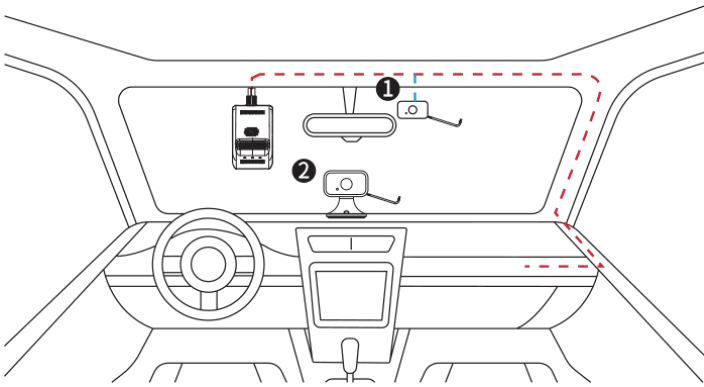
Remote AHD Camera

- Face the camera inward and install it to the windshield behind the rear-view mirror (as shown in ❶) or to the middle of the dashboard (as shown in ❷). Wipe a selected position clean, remove the protective film from the 3M tape, and attach the device.
- Use the supplied screwdriver to tighten the screw of the camera, so it keeps at the best angle. Connect the cables correctly and fas1en them securely.

DMS Camera

**This section is dedicated to AVC420.**

The DMS camera is mainly used for monitoring the driver. Fixate the camera at an angle of about 30" to the steering wheel directly facing the driver's head, as the following figure shows.

- Face the camera inward and install it to the windshield behind the rear-view mirror (as shown in ①) or to the middle of the dashboard (as shown in ②). Wipe a selected position clean, remove the protective film from the 3M tape, and attach the device.
- Use the supplied screwdriver to tighten the screw of the camera, so it keeps at the best angle. Connect the cables correctly and fasten them securely.

JC170·DMS·Camera

The DMS camera is mainly used for monitoring the driver. Fixate the camera at an angle about 30° to the steering wheel directly facing the driver's head, as the following figure shows.

30°
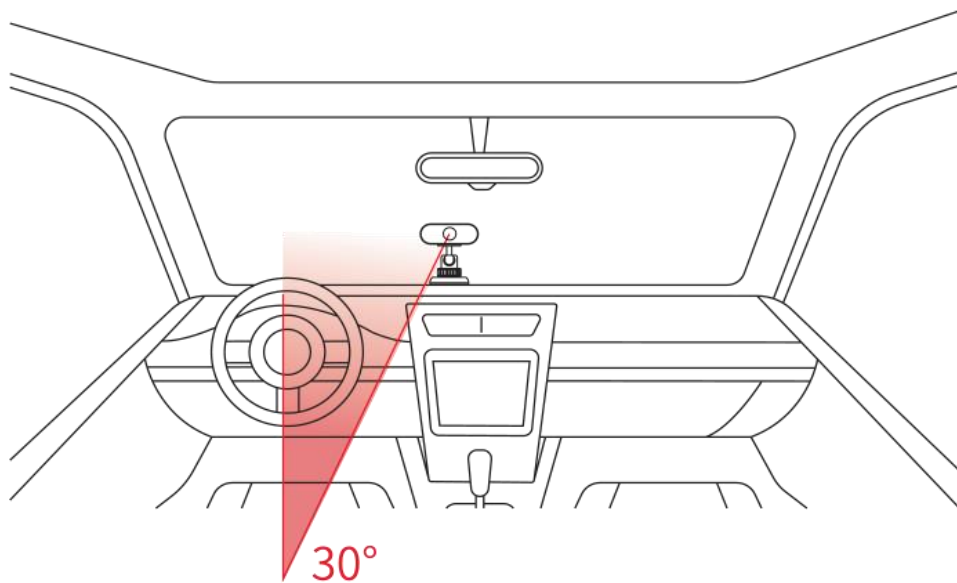
Other·Accessories
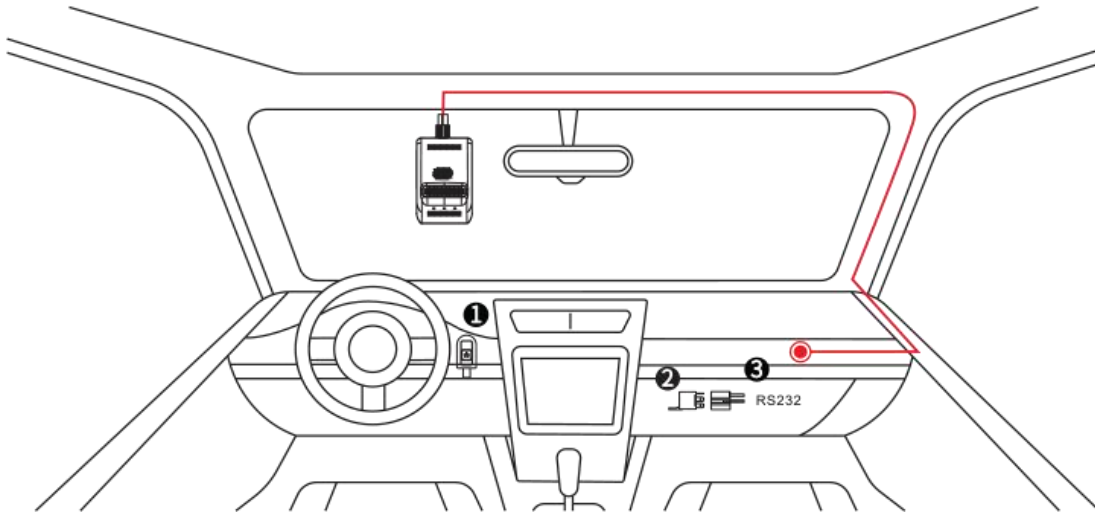
- **SOS key**

    It is used to seek help in emergencies. Connect the SOS key to the corresponding interface on the device, remove the protective film from the 3M tape, and then attach it to a proper position (such as ① in the above figure).

- **Relay**

    It is used to cut off the power and fuel of the vehicle remotely to force it to stop. Connect it to the corresponding interface on the device and place it in a proper position, such as ② in the above figure. For wiring details, see the wiring diagram.

- **TTL**

    It is used to connect to an external device for function expansion when a scenario requires a feature that cannot be offered by the device. ③ is a reference installation position.

> **Note:**
> - Choose proper accessories based on your actual needs.
> - Select a relay that goes perfectly with the battery of your vehicle.
> - It is recommended to ask a distributor, a designated business, or an expert to do the installation and commissioning.

3.6 Commissioning
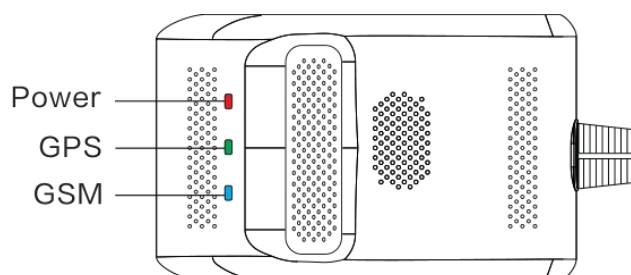
1. Check the LED, see main unit for reference.

2. Check the camera: The camera works correctly if you can view the live video of the camera and switch between the two cameras after logging in to the platform. You can also manually adjust the camera according to your needs.
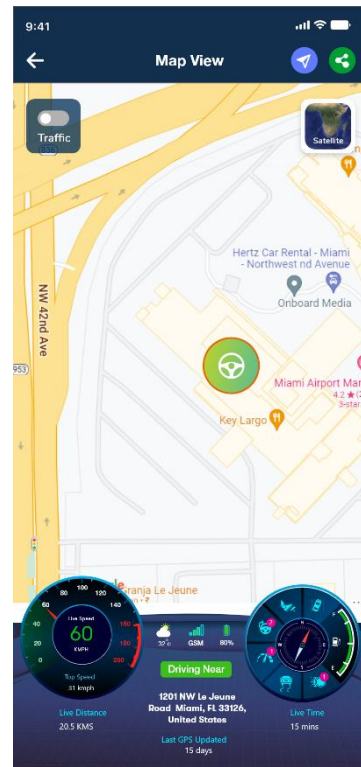
Need help? Contact 24/7 live support!

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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