AE-DI5052-G40 PRO

Installation Guide

This Manual is the property of Hangzhou Hikauto Technology Co., Ltd. or its affiliates (hereinafter referred to as "Hikauto"), and it cannot be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior written permission of Hikauto. Unless otherwise expressly stated herein, Hikauto does not make any warranties, guarantees or representations, express or implied, regarding to the Manual, any information contained herein.

About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons.

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

Trademarks Acknowledgement

- HIKVISION and other Hikauto's trademarks and logos are the properties of Hikauto in various jurisdictions.
- Other trademarks and logos mentioned are the properties of their respective owners.

LEGAL DISCLAIMER

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS MANUAL AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKAUTO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKAUTO BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE PRODUCT, EVEN IF HIKAUTO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS.

YOU ACKNOWLEDGE THAT THE NATURE OF INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKAUTO SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INFECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKAUTO WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE

SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW. ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS, OR DATA PROTECTION AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

Symbol Convention

The symbols that may be found in this document are defined as follows.

Symbol	Description
	Provides additional information to emphasize or supplement important points of the main text.
	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

TABLE OF CONTENTS

Chapter 1 Preparation

1.1 Construction Preparation

1.1.1 Requirements for Technicians

Technicians should have a good command of the following aspects:

- The functions and application of the G40P device.
- The components and working principle of the whole system.
- Internal architecture of motor vehicle and electrical wiring.
- Experience of common in-vehicle devices installation and construction.

1.1.2 Construction Site

Before the installation, get familiar with the aspects closely related to the construction site, such as installation location, the vehicle model, the selection of the installation location of the G40P device and the camera, cable length, tools, to make sure the installation and debugging go well.

1.1.3 Vehicle Electrical Information Confirmation

Confirming the vehicle electrical information is one crucial step for the installation process and can help avoid potential responsibilities related to the potential vehicle damage. Check all of the following items before the next installation steps:

- Whether the vehicle can start up normally.
- Whether the power system is well and whether other electrical malfunctions exist.
- Whether the appearance damage exists on the vehicle.

1.2 Tools

Prepare the following tools before installation.

Note

Purchase or prepare the following tools before installation.

No.	Tool	Function	Requirements	Picture Illustration
1	Wire Stripper	Strips off the electrical insulation from wires.	/	
2	Electro probe	Detects the electrical wires.	General type	
3	Straight/Cross Screwdriver	Opens the center console.	Length: approx. 20 cm	
4	Digital Multimeter	Detects the power cathode and anode, pulse, AAC, voltage, and short circuit.	General type	
5	Scissors	Cuts off the corrugated pipe, etc.	General type	
6	Insulation Tape	Wraps up wires.	General type	
7	Tie Wrap	Fixes wires.	Length: 7 cm for each	
8	3M Tape	Applies to the Driving Safety Camera base.	General type	

9	4G SIM Card	Used for platform communication. Requires an industry SIM card.	Nano-SIM Card. Purchase the SIM card before installation.	
10	Hexagon screwdriver	Used to open/close the SIM card and TF card slots.	The G40P comes with this accessory out of the box	

1.3 Device Preparation

No.	Device	Model	Picture Illustration
1	G40P Dashcam	AE-DI5052-G40 Pro	
2	TF Card (Supports dual TF cards)	AE-MW3TF1(TLC/128G)(B)	
3	Side Camera (Optional)	AE-VC236T(1.0mm)	
4	Side Camera (Optional)	AE-VC236T(1.0mm)	
5	Rear Camera(Optional)	AE-VC253T-IT(2.8mm)	
6	Wired Alarm Button (Optional, supports dual alarm buttons)	AE-IFC00(O-STD)(cable alarm)(2.5m)	

1.4 Requirements for Installation

Install and debug the intelligent terminal by strictly following the instructions below to improve the device stability and ensure the terminal delivery. Consider the following aspects when selecting the installation location and methods.

- Heat dissipation: Make sure the device is away from the heat source of the vehicle, Use 3M adhesive tape to the windshield.
- Waterproof method: Waterproof the terminal and other devices and install the bracket and protection box when necessary.
- Moisture-proof method: Install the terminal on a moisture-proof and well-ventilated location.
- Electricity: Keep the terminal away from magnetic interference.
- Cable routing: Make sure the cable routing is hidden. Wrap the cables with corrugated pipes to make sure the cable routing is neat.

Chapter 2 Installation

2.1 Connect Cables to Device

2.1.1ConnecttoMainBundle

Identify Cables

Identify the function of each cable before connection.

No.	Color	Definition
1	Red	VCC Cable(Power Cord)
2	Orange	ACC Signal Cable
3	Black	Ground
4	Green	CAN
5	Black	RS-232 Serial Port, reserved connection to permission
6	Multiple colors	Alarm Buttons(I/O Port)
7		
8		

9		
10	Black	Connects to Device Power Interface

Find the power supply

Step 1 Find the vehicle signal cables: power anode, power cathode (ground), and ignition signal (ACC ON).

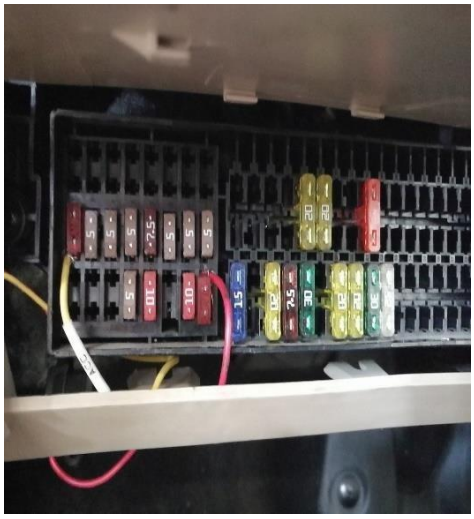
Step 2 Use the electro probe to test whether the cable is powered after turning off the vehicle. If the current is detected, this cable is connected to constant power and then you can test the voltage.

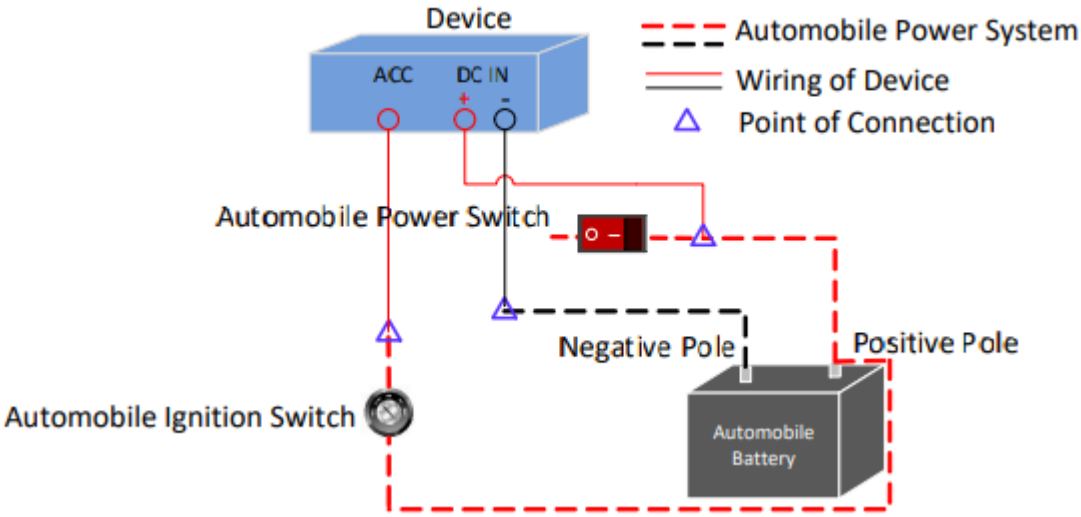
Step 3 Identify the ACC signal cable: Test the cable with the electro probe when the vehicle is turned off and under ACC gear respectively. If no current is detected when the vehicle is turned off, but the current is detected under the ACC gear, this cable is an ACC cable. Then you can test the voltage. Make sure the vehicle power cord and ACC power cord voltage is normal when the vehicle is turned off or ignited. You can take it as the power supply point for the device.

The following figures are only for illustration. The actual vehicle model prevails.

Note

- Strictly comply with electricity regulations when connecting the device power cord, ACC cable, and ground cable.
- DO NOT use the power cord and ACC cable at the same time to avoid exceptional device power-off when you turn off the vehicle. It will damage both the TF card and the device, and cause TF card exception.



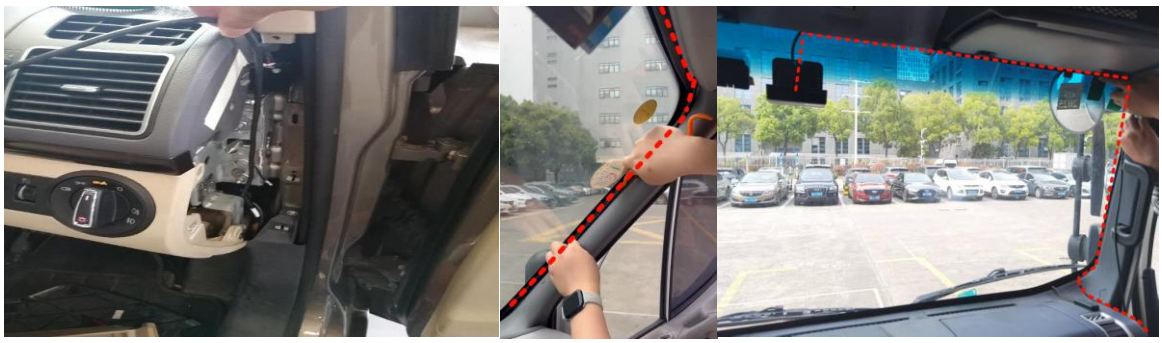


Connect G40P Device to Power

Step 1 Pull the power cord out gently from the fuse box and lead the cable up along the A pillar.

Step 2 Route the cable closely along the windshield and connect it to the G40P device.

Step 3 Hide the cable on the vehicle roof.



2.1.2 Connect to Device

There are five cables extended from the G40P device. Identify the cable function from the following table.

Label	Interface	Function
/	16-pin male plug-in	Connects to G40P.
Ethernet	6-Pin Male Plug	Network port
CH3_B	4-Pin Male Plug	Connects to 4 -pin BM Female Terminal Camera
CH4_B	4-Pin Male Plug	Connects to 4 -pin BM Female Terminal Camera
CH5_B	4-Pin Male Plug	Connects to 4 -pin BM Female Terminal Camera
VOUT_A	4-Pin Male Plug	4 -pin aviation head port connection 4 -pin aviation head female head display screen (additional power supply is required for display screen).

Caution

- Connect the cameras to their corresponding interfaces. Otherwise, it may cause channel switch mess in the app live view.
- There is a notch on the power cord and camera interface. Align the notch and the bulge to avoid pin damage when connecting the cable to the interface.

2.2 Install Device

2.2.1 Install G40P Device and Adjust Angle

Before you start

Scan the QR code to download the app for G40P.

IOS & Android

Steps:

Step 1 Make sure the power supply of the G40P is disconnected, insert the TF card and SIM card, then use the 6-pin screws to tighten the cover.

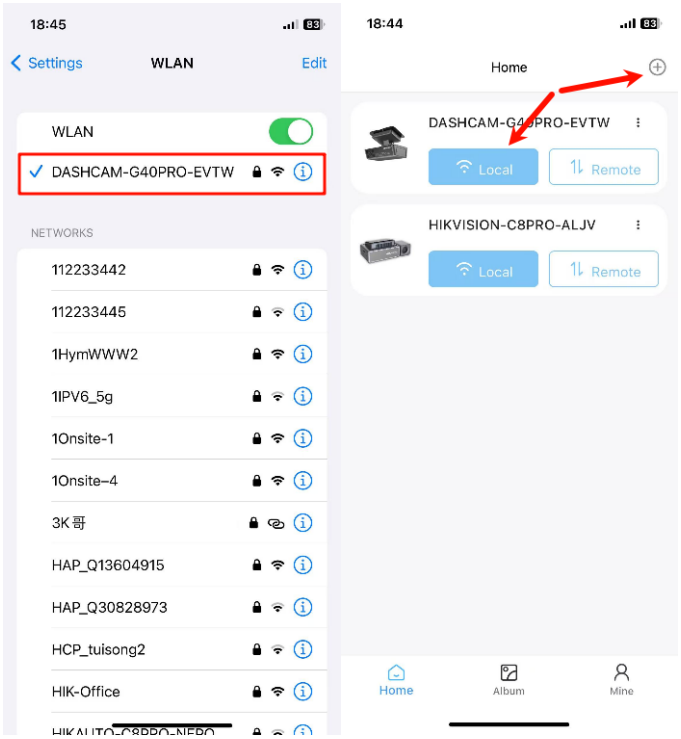
Note

When you use the TF card for the first time, insert the TF card into the device and format the card on the app. Then the TF card can be used for recording. Otherwise, the TF card cannot be used normally. (You can view the contents of chapter 3.3.1 to format the TF card)

Step 2 Connect the G40P device to the app.

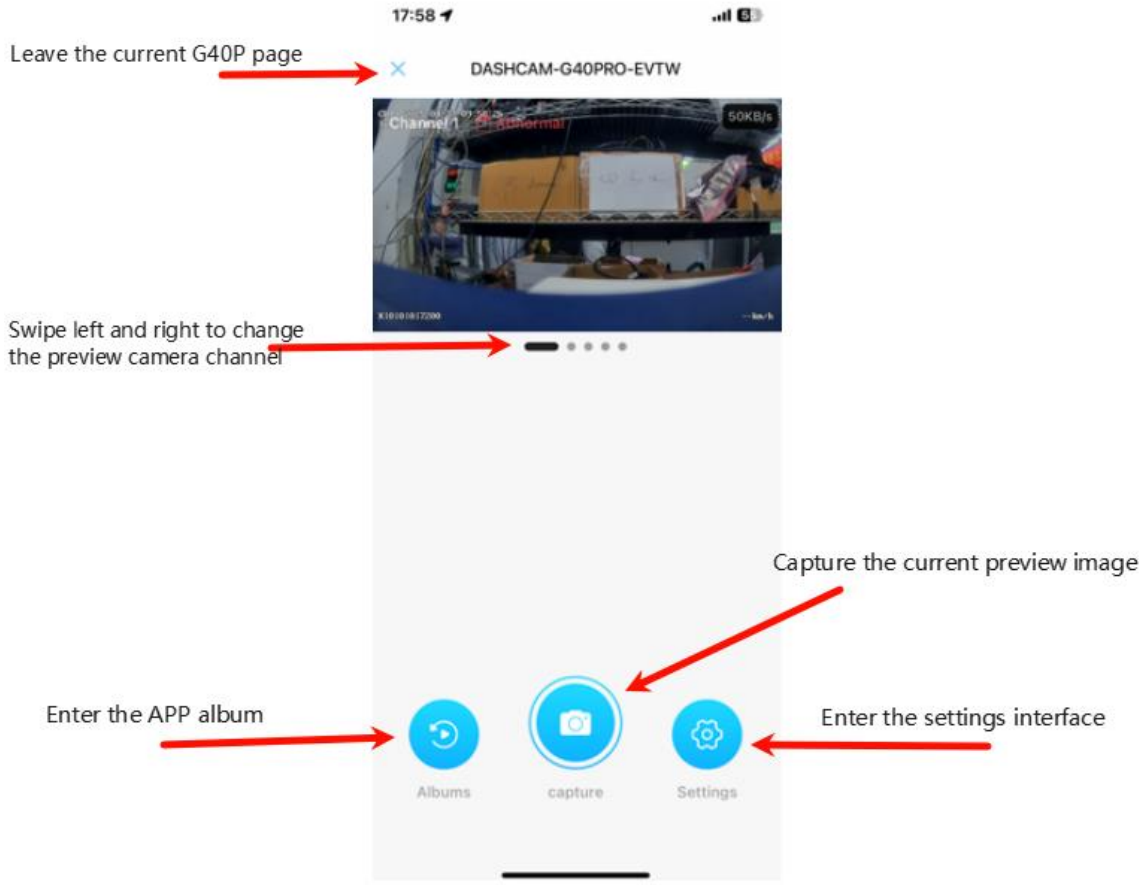
(1) Power the device up. Press the Wi-Fi button on the device to enable the Wi-Fi function and you will receive the audio prompt that the hotspot is enabled.

(2)Run the app and connect to the Wi-Fi whose SSID is DASHCAM-G40PRO-XXXX. The default password is **Dash12345**. The app jumps to the main interface after Wi-Fi is connected.

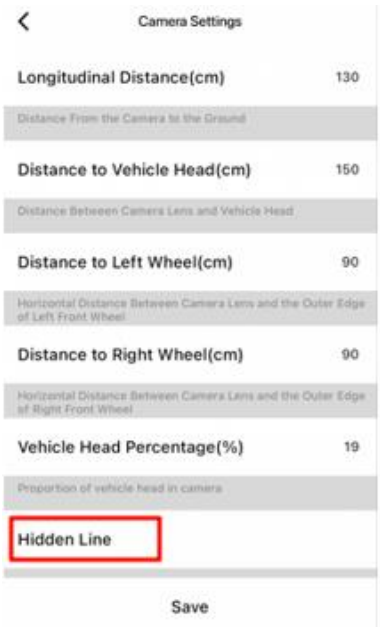


Note

When G40P is connected to the mobile phone APP for the first time after leaving the factory, you need to activate the device and reset the password. After completing the password reset, you need to reconnect G40P.



Step 3 Go to **Settings > Smart Settings > ADAS Settings > Camera Settings > Hidden Line**, and adjust the mounting position of G40P on the windshield and the bracket angle according to the imaging effect on the APP.



Note

Recommended installation position: ±15cm from the center of the glass, with the front camera

within the wiper coverage area, a 1:1 ratio of the top to the bottom of the screen, and the driver and steering wheel within the interior view without any obstruction (such as rearview mirror obstruction, etc.)

Step 4 Tighten the bracket knob.

Step 5 Select a device installation location. Normally, the G40P terminal is installed on the center of the front windshield. To make sure that the picture is as unobstructed as possible by the wipers after installation, use a watering can and a rag to wipe the windshield clean.

Step 6 Press the 3M tape for 30 seconds and make sure no bubble is in the tape.

Paste the bracket

Attach the G40P on the bracket

2.2.2Install Side view Camera and Adjust Angle

Step 1 Install the side view camera on the left and right sides of the truck compartment as shown in the figure below, and complete the wiring.

Note

It is recommended to use a punch-hole mounting method to fix the camera.

Step 2 Adjust the Camera angle.

(1) Loosen the screws on the base, then use a Phillips screwdriver to loosen the screws on the side of the camera housing.

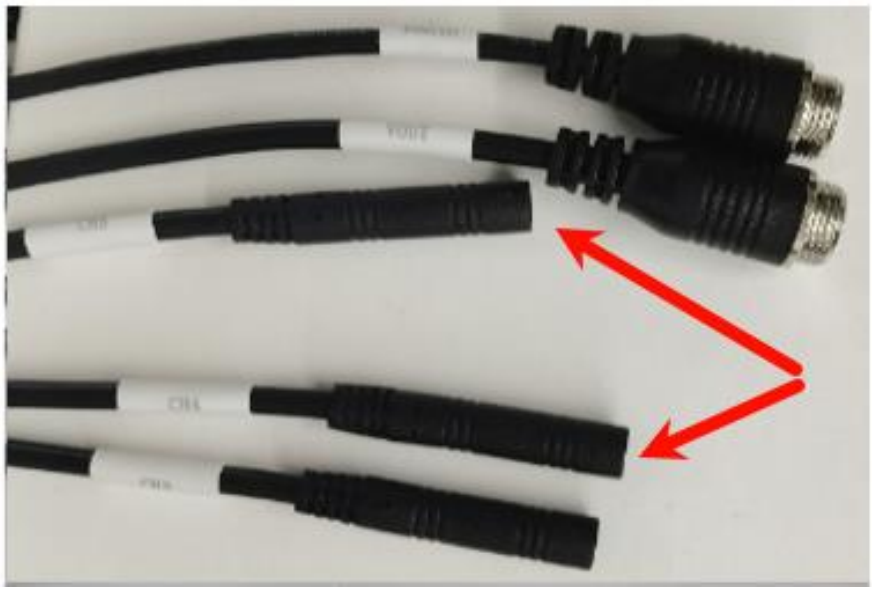
(2) Rotate the camera to adjust the lens angle. Adjustment Range: Vertical: 15° to 75°.

(3) Tighten the screws to secure the lens.

Note

It is recommended to align the center point of the lens with the second scale from top to bottom.

Step 3 Connect the left and right cameras to the CH3 and CH4 ports of the extended harness.



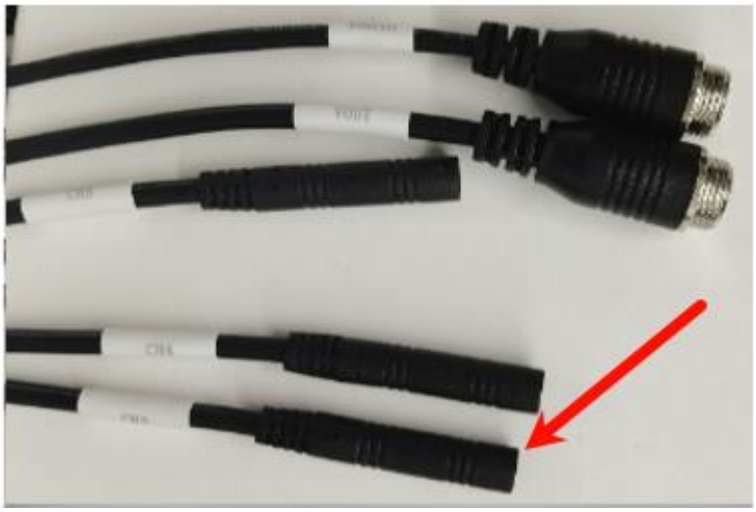
Step 4 Make sure the power supply of the G40P is disconnected, and plug the expansion harness into the interface of the G40P

Step 5 Power on the G40P, connect the G40P with the mobile app, and check the side-view camera image.

2.2.3 Install Rear View Camera and Adjust Angle

Step 1 Install the rear view camera on the rear of the vehicle as shown in the figure below, and complete the wiring.

Step 2 Connect the rear cameras to the CH5 ports of the extended harness.



Step 3 Make sure the power supply of the G40P is disconnected, and plug the expansion harness into the interface of the G40P

Step 4 Power on the G40P, connect the G40P with the mobile app, and check the rear-view camera image.

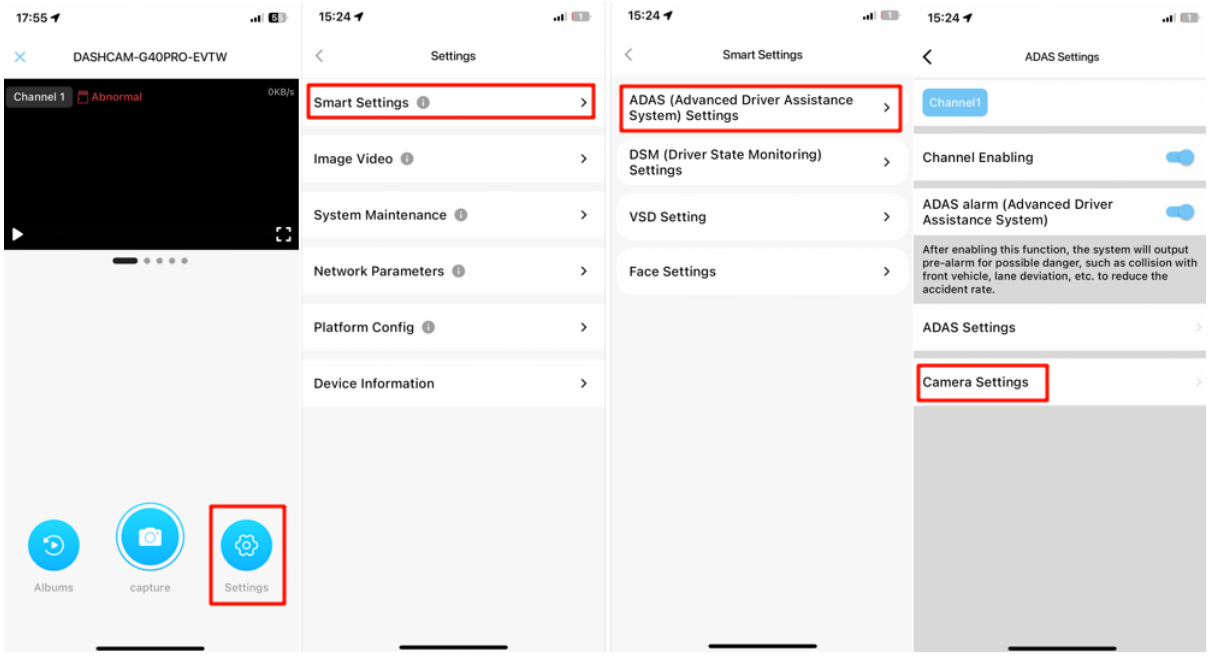
Chapter 3 Function Settings

3.1 Smart settings

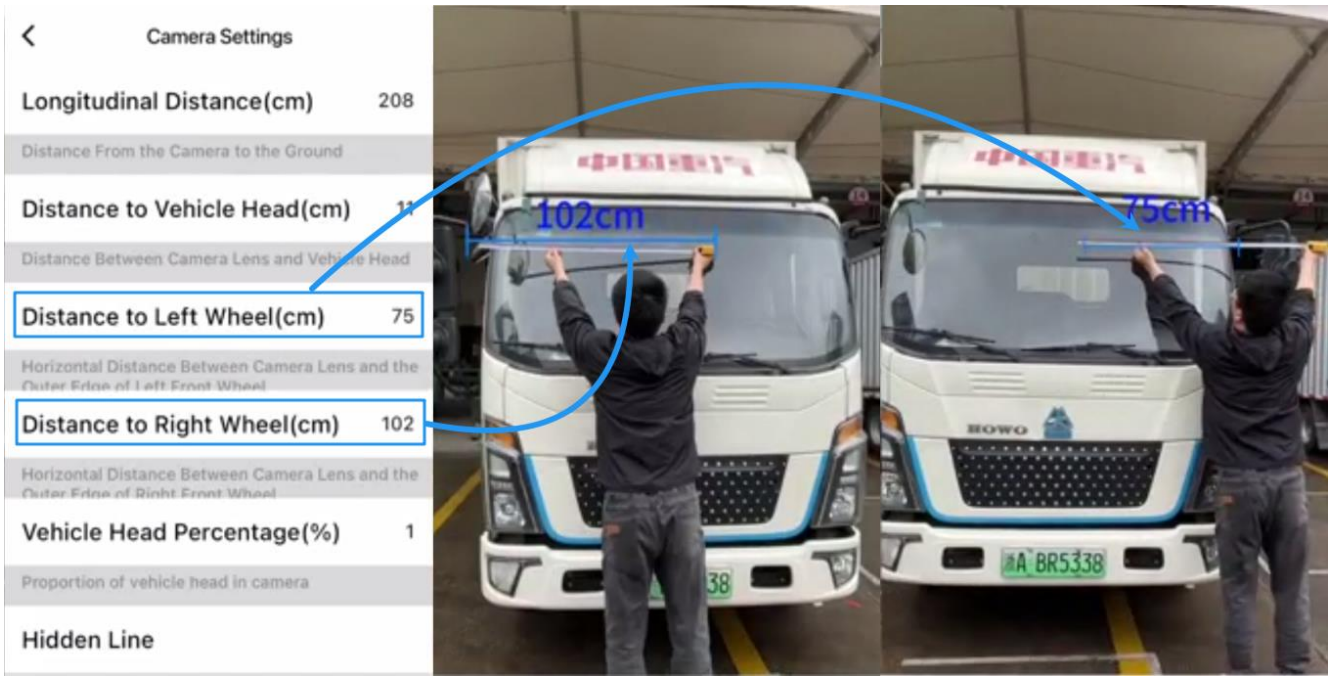
3.1.1 ADAS Settings

ADAS function is realized by the built-in camera of the G40P device. Set the camera before using the ADAS function.

Step 1 Run the app and go to **Settings > Smart Settings > ADAS Settings > Camera Settings**.

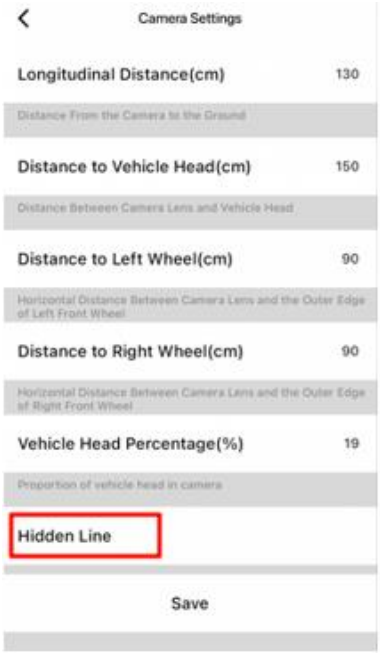


Step 2 Measure the camera related parameters.



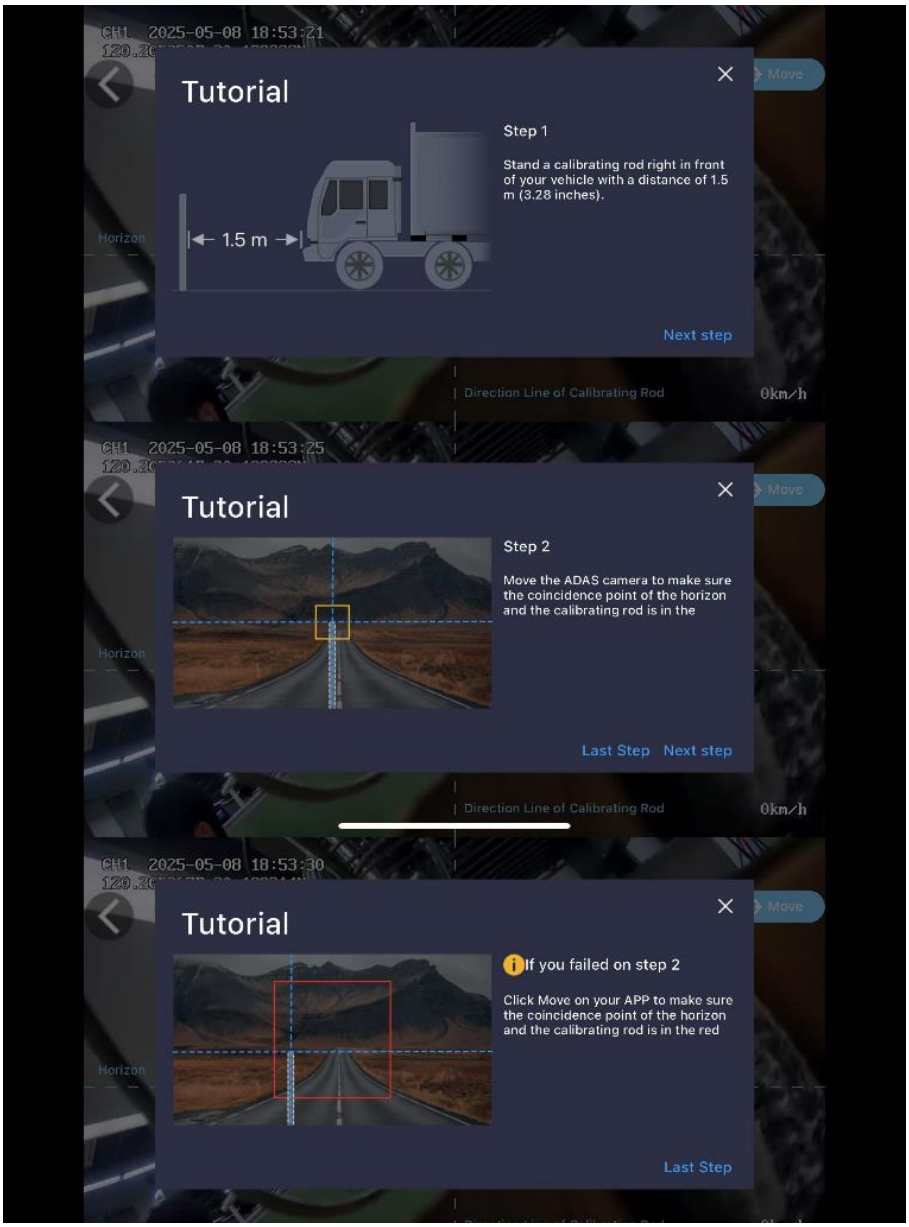
Step 3 Calibrate hidden line

(1) Go to **Settings > Smart Settings > ADAS Settings > Camera Settings>Hidden Line**, start calibration.



(2) Click **Tutorial** to view the calibration introduction.

Follow the instructions to adjust the camera angle to align the blue horizontal line with the horizon.



(3)Make sure the intersection of the lane and the horizon coincides with the center point. You can click the **Move** button to manually adjust the position of the center point in the box.

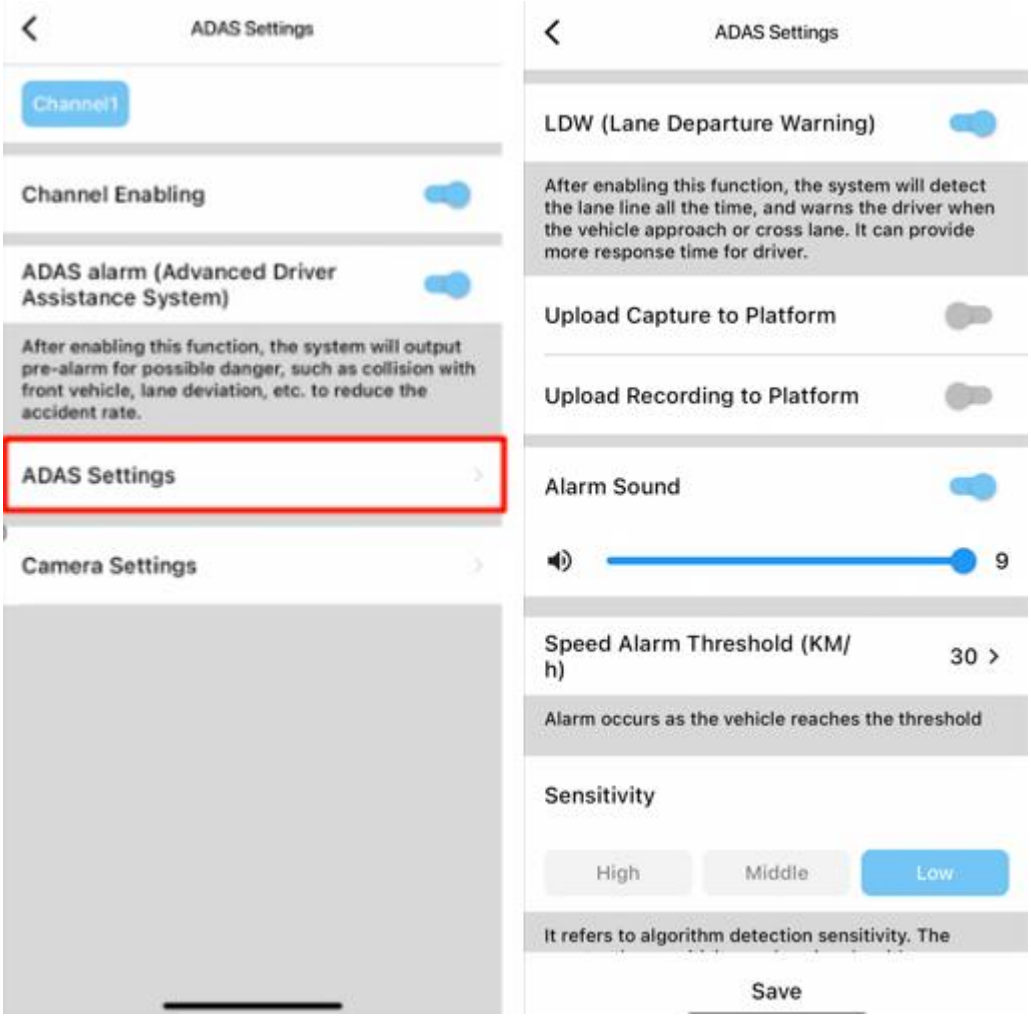
Step 4 Set ADAS related alarms.

For each alarm, you can set the following four parameters: Upload Capture to Platform, Upload alarm Recording to Platform, Alarm Sound, Speed Alarm Threshold, Sensitivity.

- Alarm Sound: The higher the value, the higher the alarm volume
- Speed Alarm Threshold: Set the vehicle speed that will trigger alarm. You can set the threshold as 0 for demonstration. Under this condition, the alarm is triggered when the vehicle is still.
- Alarm Sensitivity: The higher the sensitivity is, the more easily the alarm will be triggered.

Note

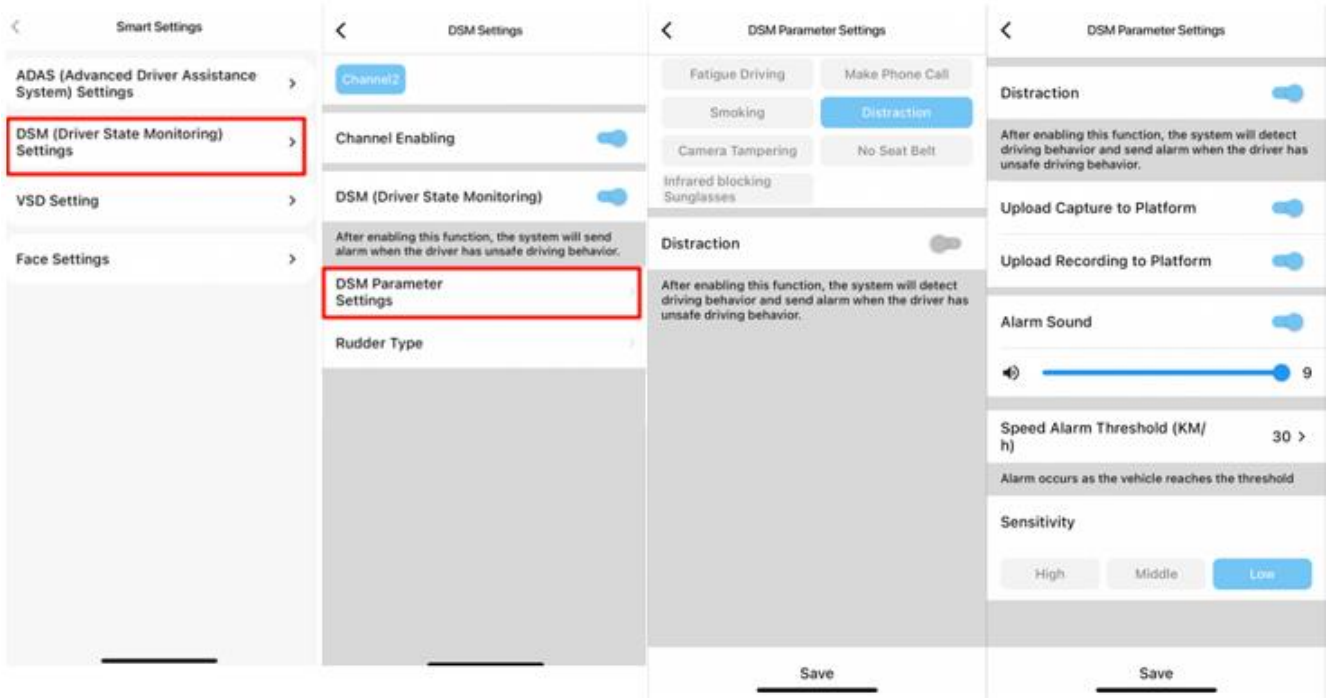
PCW events are different from other events, an alarm will only be triggered when the vehicle speed is below the configured lowest speed threshold.



3.1.2 DSM Settings

The DSM alarms of G40P device supports include fatigue driving, smoking, distraction, video tampering, and etc. You can set these alarms in the app: **Settings > Smart Settings > DSM Settings**.

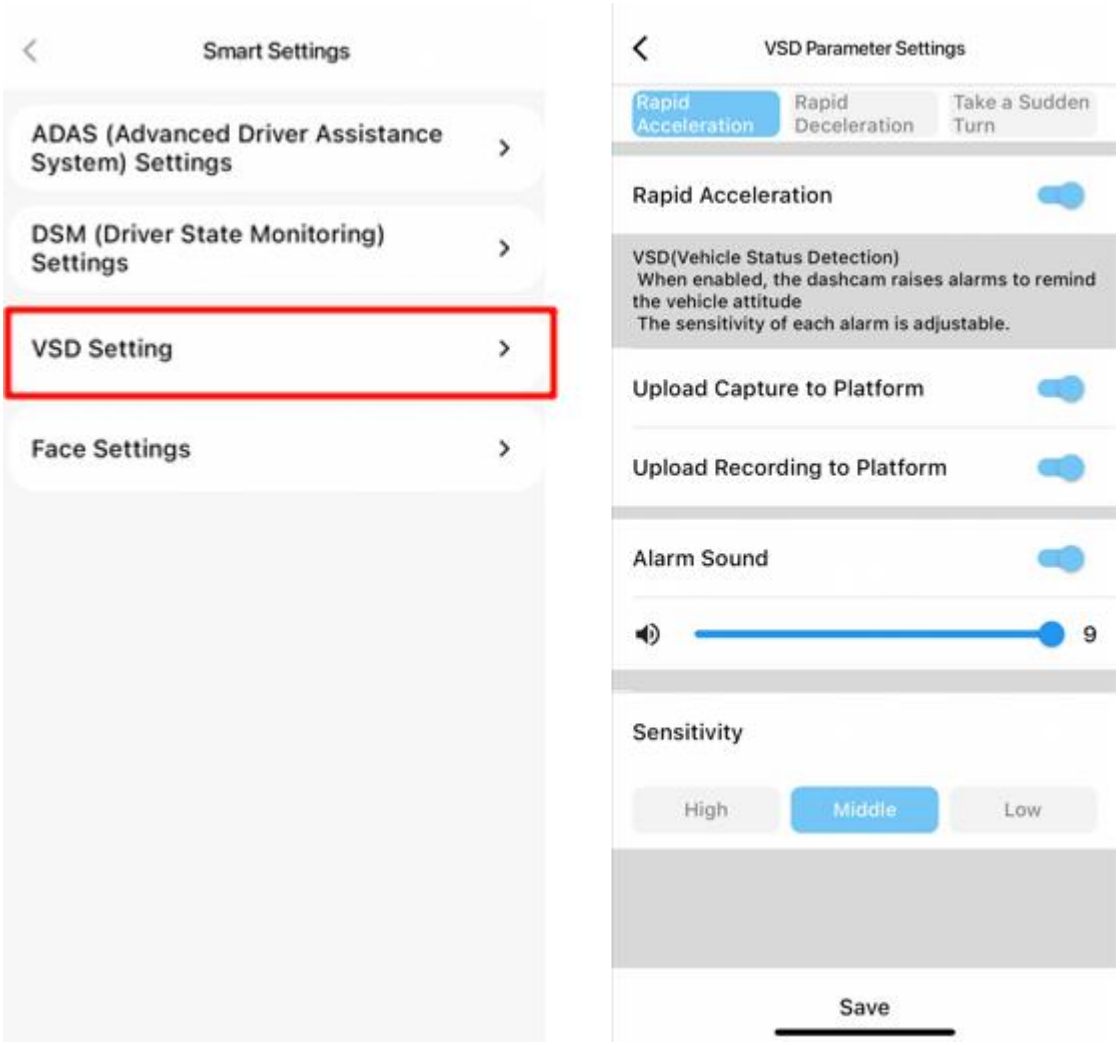
- Alarm Sound: The higher the value, the higher the alarm volume
- Speed Alarm Threshold: Set the vehicle speed that will trigger alarm. You can set the threshold as 0 for demonstration. Under this condition, the alarm is triggered when the vehicle is still.
- Sensitivity: The higher the sensitivity is, the more easily the alarm will be triggered.



3.1.3 VSD Settings

The VSD (Vehicle status Detection) alarms of G40P device supports include Rapid acceleration, Rapid deceleration, Take a sudden turn, and etc. You can set these alarms in the app: **Settings > Smart Settings > VSD Settings**.

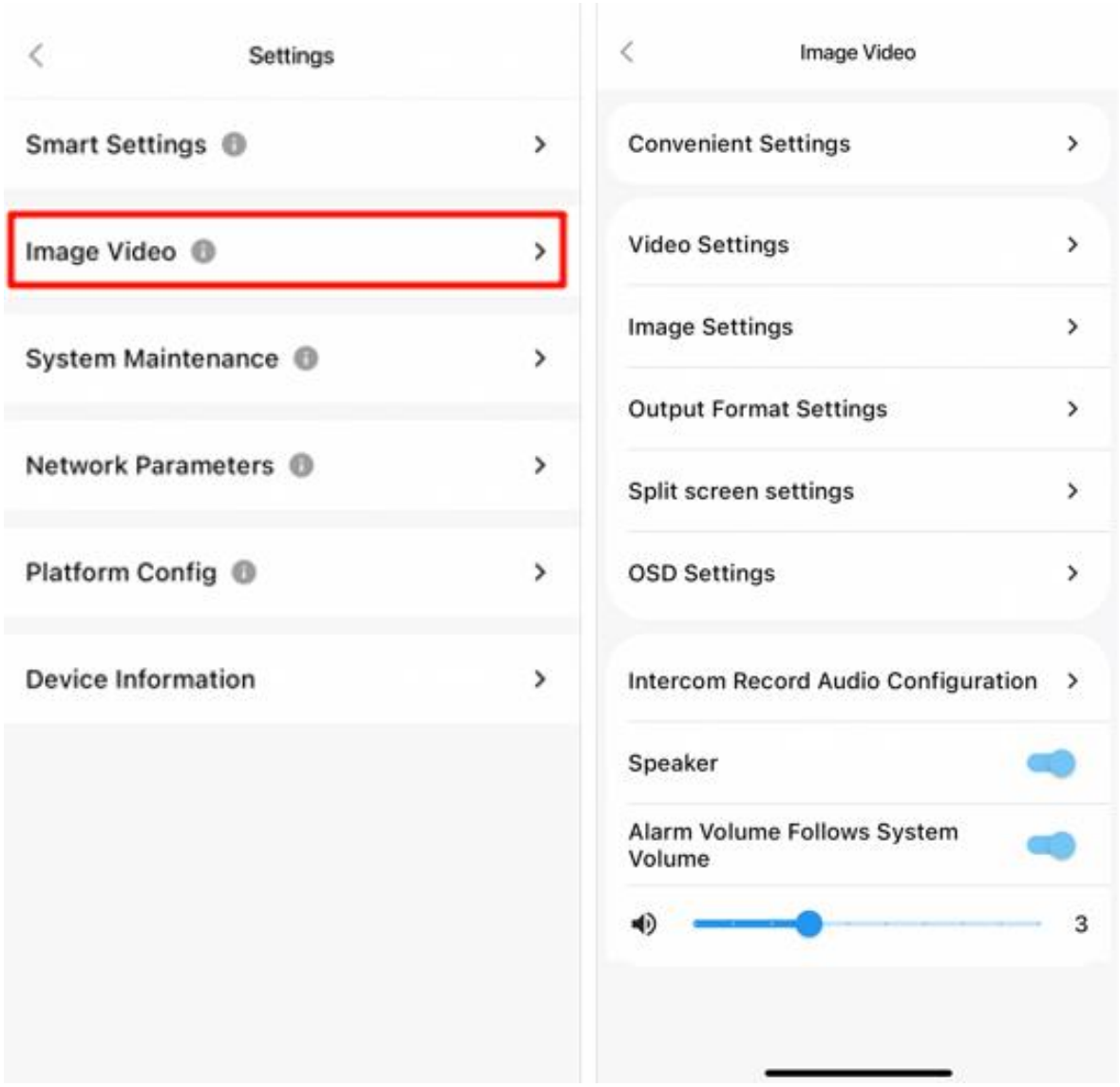
- Alarm Sound: The higher the value, the higher the alarm volume.
- Sensitivity: The higher the sensitivity is, the more easily the alarm will be triggered.


Smart Settings
ADAS (Advanced Driver Assistance System) Settings
DSM (Driver State Monitoring) Settings
VSD Setting
Face Settings
VSD Parameter Settings
Rapid Acceleration
Rapid Deceleration
Take a Sudden Turn
Rapid Acceleration
VSD(Vehicle Status Detection)
When enabled, the dashcam raises alarms to remind the vehicle attitude
The sensitivity of each alarm is adjustable.
Upload Capture to Platform
Upload Recording to Platform
Alarm Sound
9
Sensitivity
High
Middle
Low
Save

3.2 Image Video

You can set configuration parameters, such as audio and video codecs.

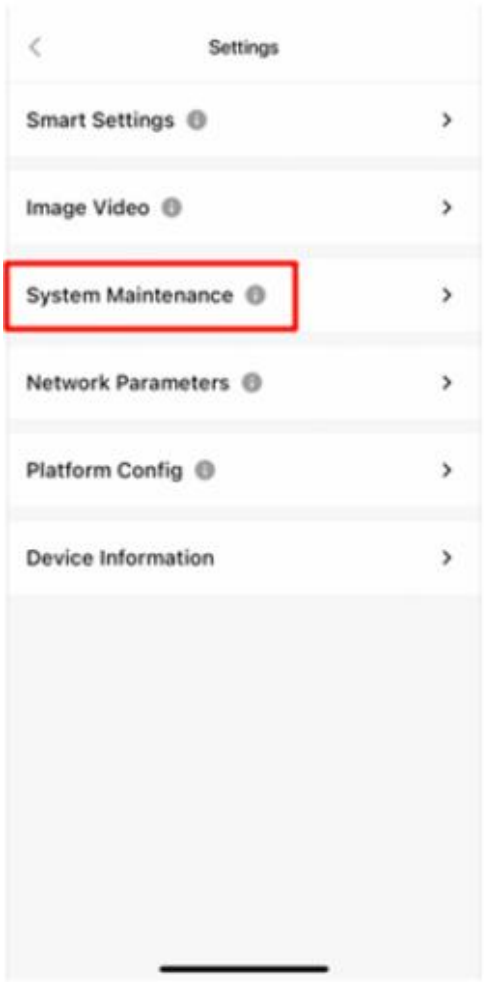
- Convenient Settings: You can set the sensitivity to trigger the overspeed alarm. The higher the sensitivity is, the more easily the alarm will be triggered.
- Video Settings: Batch set the video codec parameters of channels, such as H264 and H265
- Image Settings: Set more detailed image parameters
- Output Format Settings: Set the format of the video output to the screen, such as CVBS and AHD
- Split screen settings: Set the effect of the multi-channel screen layout
- OSD Settings: Configure the channel name.
- Intercom Record Audio Configuration: Set the audio codecs for video input and output

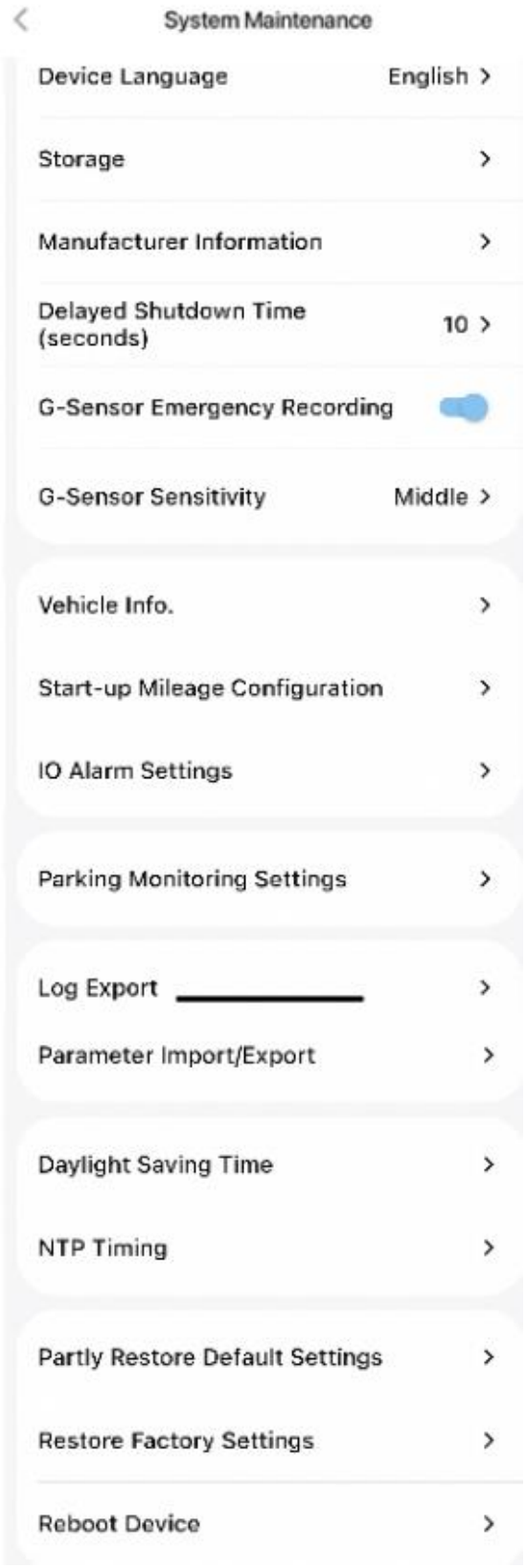


3.3 System Maintenance

You can set and configure other operating parameters of the G40P device.

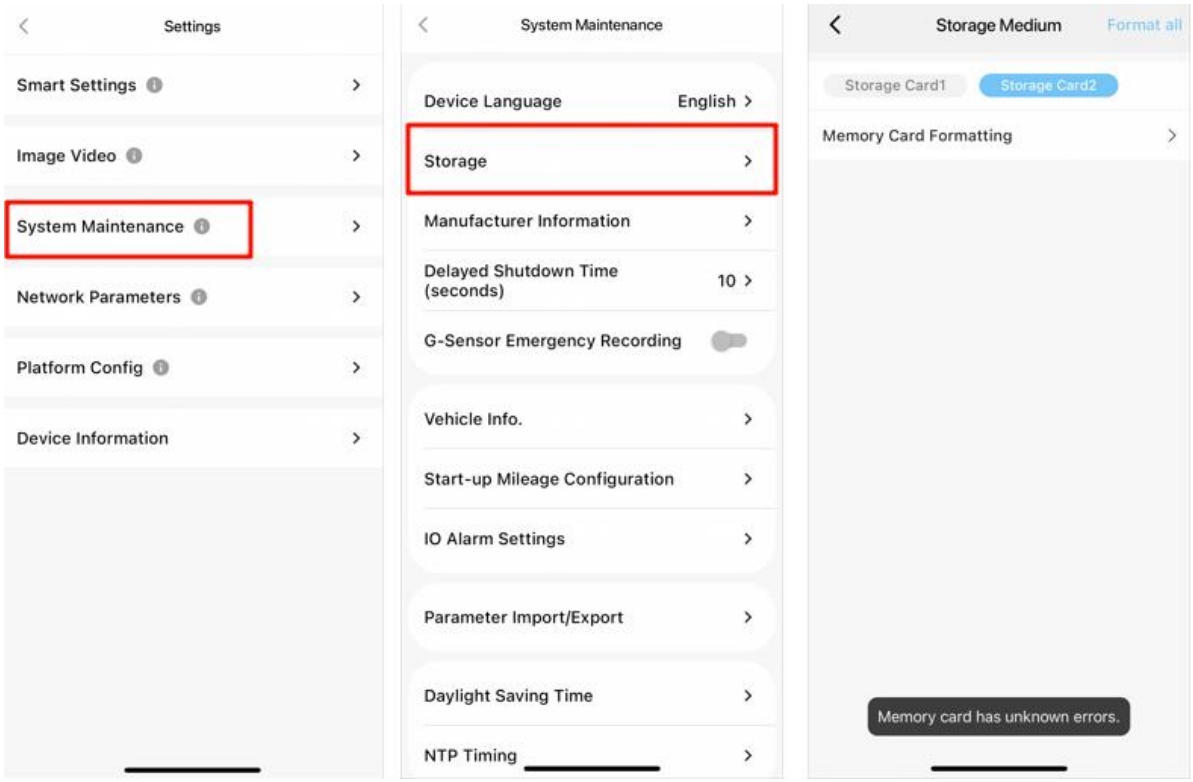
- Device language: Currently available in English, Portuguese, Russian, and Turkish.
- Storage: You can check the status of the TF card and format the TF card
- Manufacturer information: You can check the device information of the G40P
- Delayed shutdown time: Can set the shutdown delay time, the device can still continue to work normally after the vehicle is turned off
- G-Sensor Emergency Recording: When turned on, the G40P will automatically wake up when the vehicle is collided while the ignition is off.
- G-Sensor Sensitivity: The higher the level, the easier it is to trigger VSD alarm
- Vehicle Info. : You can set the vehicle information that the device is bound to, such as the license plate
- Start-up Mileage Configuration: Record mileage information based on GPS data
- IO Alarm Settings: You can select high and low signal settings
- Parking Monitoring Settings: You can set the Sentry Mode as well as the Collision Wake-up mode
    - Sentry Mode: When the vehicle is turned off, the camera inside the vehicle will wake up the device when it detects the movement of an object or person.
    - Collision Wake-up: When the vehicle is hit while the engine is off, the G-sensor will wake up the device and start recording.
- Parameter Import/Export： Export the configuration file information of the device, the file will be saved in the mobile phone APP
- Daylight Saving Time: DST settings
- NTP Timing: You can manually set the NTP server address
- Partly Restore Default Settings： Reset all other configurations except those related to the network itself. The device will not return to the inactive state.
- Restore Factory Settings: Fully restore the factory mode, and all configuration information of the device will be erased, the device will return to an inactive state
- Reboot Device: Restart the device


Settings
Smart Settings
Image Video
System Maintenance
Network Parameters
Platform Config
Device Information

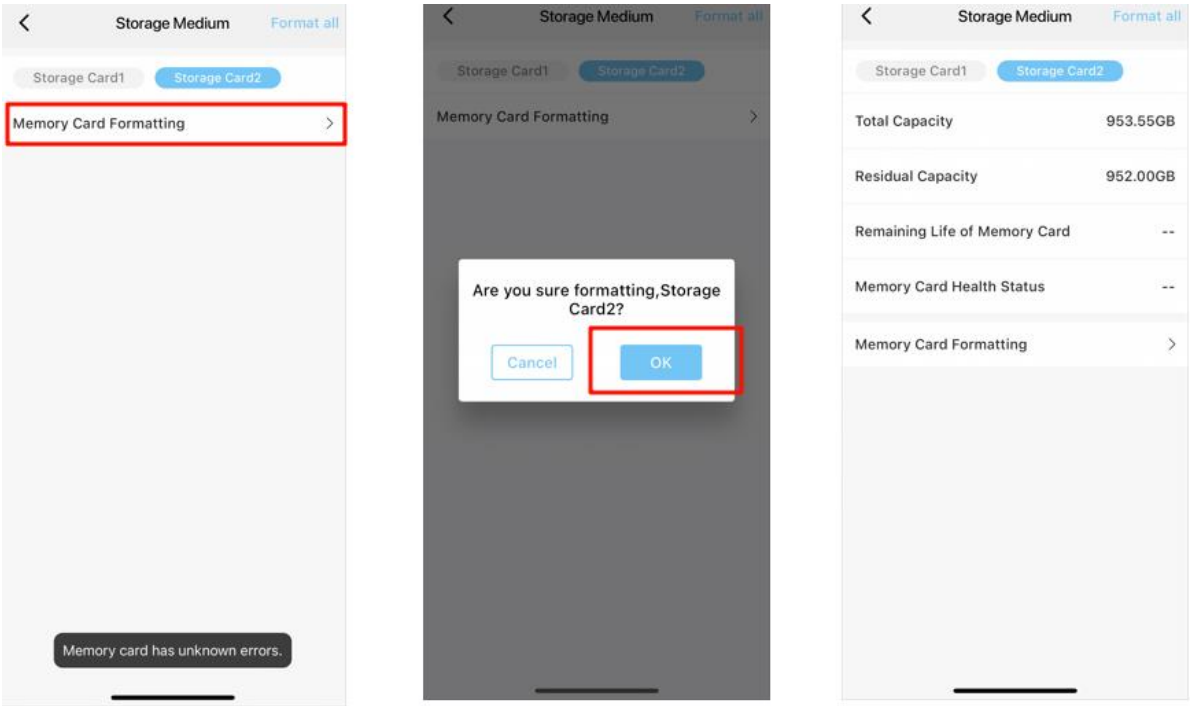

System Maintenance
Device Language
English
Storage
Manufacturer Information
Delayed Shutdown Time (seconds)
10
G-Sensor Emergency Recording
G-Sensor Sensitivity
Middle
Vehicle Info.
Start-up Mileage Configuration
IO Alarm Settings
Parking Monitoring Settings
Log Export
Parameter Import/Export
Daylight Saving Time
NTP Timing
Partly Restore Default Settings
Restore Factory Settings
Reboot Device

3.3.1 Format the TF card

Step 1 Insert the TF card and go to **System Maintenance>Storage** on the app.



Step 2 Click the **Memory Card Formatting** button and click **Yes** in the pop-up window to start formatting.



Note

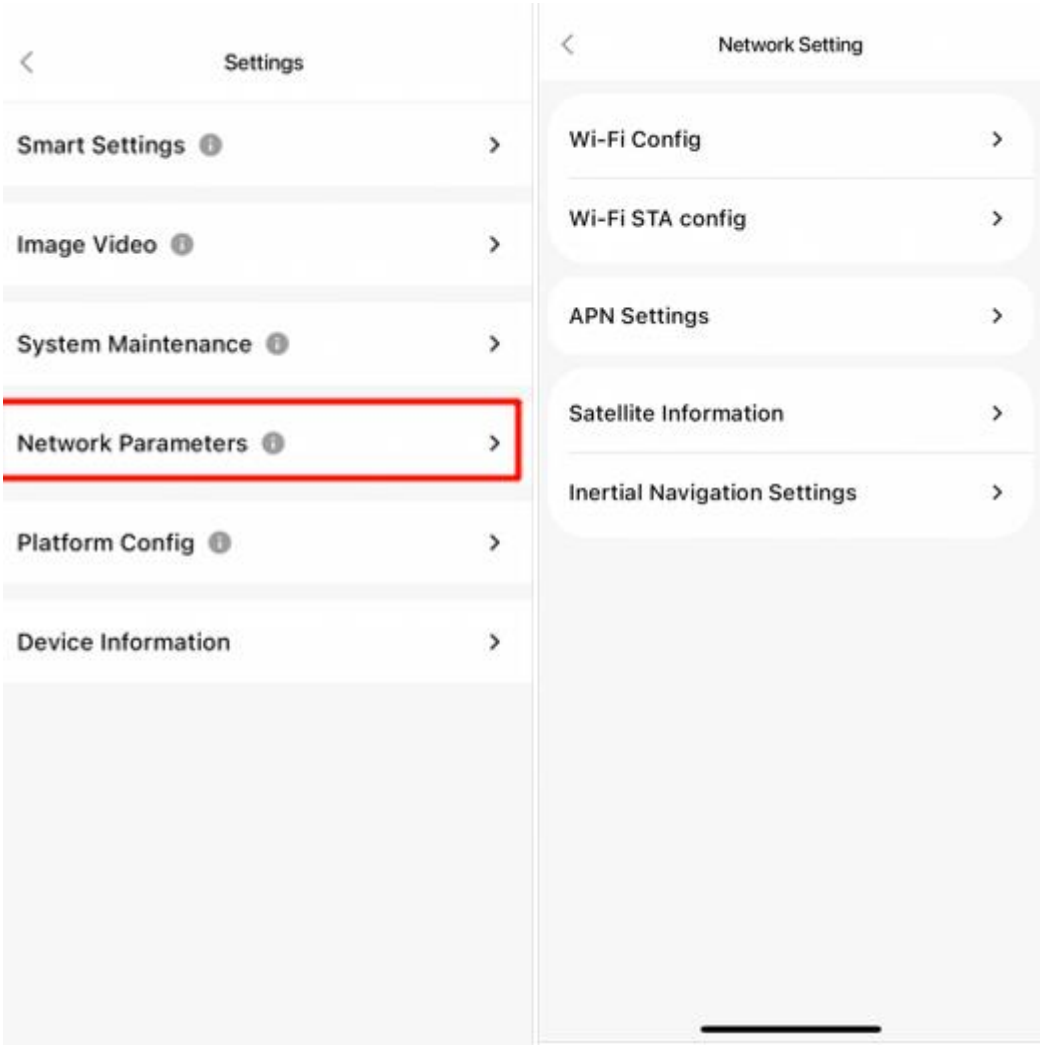
At the beginning of formatting, G40P will send out a voice prompt, and a buffered pop-up window will appear on the APP interface; at the end of formatting, the G40P will give a voice prompt

Except for the first time to insert the TF card, it is not recommended to format it again during normal use, otherwise it will cause the video to be lost and cannot be recovered

3.4 Network Parameters

Go to **Settings > Network Parameters**.

- Wi-Fi Config: You can change the password for the Wi-Fi.
- APN Settings: You can configure the APN parameters for 2 SIM cards.
- Satellite information: View the number of GPS satellites and signal strength that are currently recognized
- Inertial Navigation Settings: Make the GPS trajectory curve more rounded



Chapter 4 Platform Settings

4.1 Configure ISUP5.0 platform parameters on the device

Connect the APP to enter the configuration interface; Go to **Settings > Platform Config > ISUP5.0 Platform**

Enable the **Platform Enabled** startup function;

Configure the **IP Address** as the HCP address;

Configure port 7660 for HCP at **Port Number**;

Terminal ID is the registered name of the device, configured as the serial number (SN) of the device;

Encryption Key is the host registration password, customized; for example, Hik147258;

Click the **Save** button to save the configuration;

4.2 Configure ISUP5.0 platform parameters on the HCP

Open the browser, enter the IP address of HCP on the web end, and enter the account/password to enter the configuration interface;

Click on **Device > Device and Server > On-board Device**， and on this interface, click **Add** to add device information;

Basic configuration information

Select Device ID for Adding Mode;

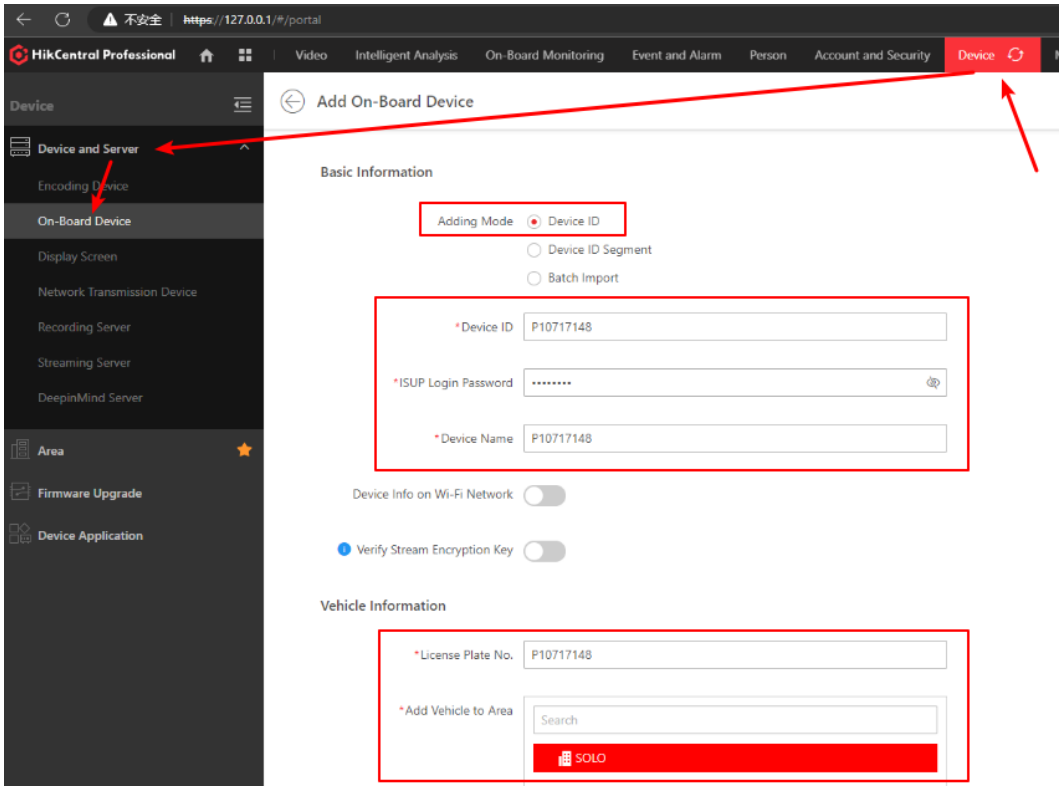
Configure **Device ID** as Host Serial Number (SN);

ISUP Login Password configured as host registration password, configured as abcd1234

Configure **Device Name** according to requirements;

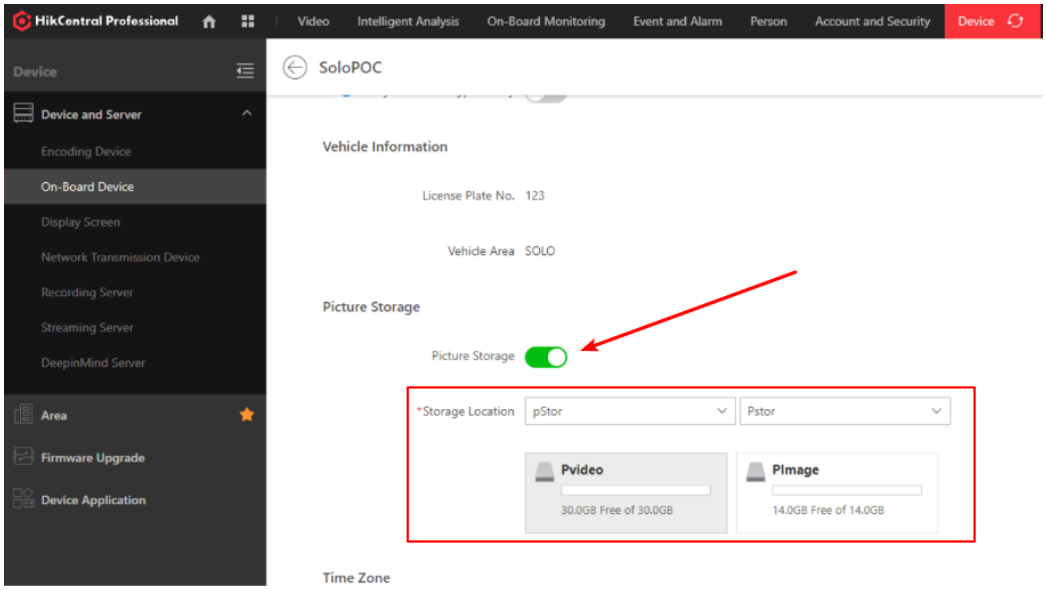
License Plate No. configured according to requirements;

Configure **Add Vehicle to Area** according to requirements;



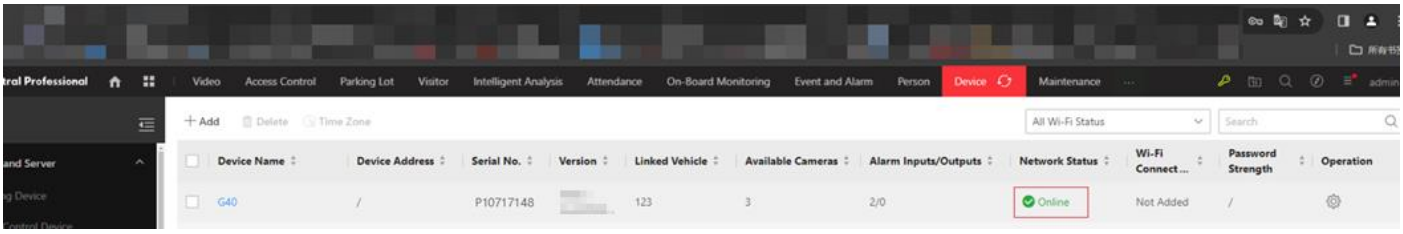
Configure storage information

Open the **Picture Storage** button and select the corresponding storage device;



After configuration is completed, the online status of the device can be seen in the **Device>Device and Server>On board Device** of HCP;

The device registration status cannot be viewed on Dashcam, it can only be viewed on the platform.



Chapter 5 Upgrade and FAQs

5.1 What should I do when the mobile phone cannot connect to the device hotspot?

Step 1 Go to **My** > **General Settings** > **Clear Cache**.

Step 2 Shut down the apps.

Step 3 Restart the app and connect to the hotspot again.

5.2 Upgrade the G40P Device by TF Card (Automatically delete the update package after deletion)

Step 1 Insert the TF card used for upgrade into the G40P device and format the TF card on the app.

Step 2 After the TF card can record normally (REC blue light on the device is always on), remove the TF card.

Note

Skip the first two steps if the TF card can record videos normally on the G40P device.

Step 3 Unpack the zip package and put the digicap.dav file in the root directory of the TF card.

Step 4 Insert the TF card into the device and the device enters the upgrading process automatically. An audio prompt will also be played.

Step 5 After the upgrade is completed, the device restarts itself and the upgrade package will be deleted.

5.3 Restore the G40P Firmware

Step 1 Follow step 1 and step 2 in 5.2 to format the TF card.

Note

Skip the first two steps in 5.2 if the TF card can record videos normally on the G40P device.

Step 2 Rename the digicap.dav file as factory.bin and put the file under the root directory of the TF card.

Step 3 Insert the TF card into the TF1 card slot of the device.

Step 4 Power off the device and power up the device after the LED lights run off.

Step 5 Wait for about two minutes. If the firmware is restored, the device restarts itself automatically, plays the startup music, and the breathing light enters the breathing mode.

Step 6 Delete the factory.bin file in the TF card manually after the firmware is restored.

5.4 Upgrade the G40P Device in Batch by TF Card

Step 1 Prepare the TF card for upgrade.

(1) Follow step 1 and step 2 in 5.2 to format the TF card.

Note

Skip the first two steps in 5.2 if the TF card can record videos normally on the G40P device.

(2) Extract the package and rename the digicap.dav file as digicap_FACTORY_BACK_DOOR and put the file in the root directory of the TF card.

Step 2 Upgrade the device.

(1) Insert the prepared TF card in the running G40P device (any card slot is allowed).

(2) The G40P device upgrades itself after detecting the upgrade package.

After the upgrade is completed, the G40P device plays the audio prompt “Upgraded”.

(3) Unplug the TF card and restart the device by itself.

Note

After the device is upgraded, the upgrade package in the TF card will not be deleted and can be used again.


See Far, Go Further