QUICK START GUIDE

VIA Mobile360 M800

EVK

1.04-26122023

Copyright

Trademarks

Disclaimer

VIA Technologies makes no warranties, implied or otherwise, in regard to this document and to the products described in this document. The information provided in this document is believed to be accurate and reliable as of the publication date of this document. However, VIA Technologies assumes no responsibility for the use or misuse of the information (including use or connection of extra device/equipment/add-on card) in this document and for any patent infringements that may arise from the use of this document. The information and product specifications within this document are subject to change at any time, without notice and without obligation to notify any person of such change.

VIA Technologies, Inc. reserves the right the make changes to the products described in this manual at any time without prior notice.

Revision History

Version	Date	Remarks
1.04	26/12/2023	Updated descriptions in Appendix section A.1.2 for seatbelt alert logic.
1.03	26/07/2023	Updated descriptions in the ADAS Calibration and DSS Calibration sections.
1.02	26/06/2023	Added instructions for adding the optional Seatbelt Sensor accessory in Appendix A. Updated the "Trips" and "Stats" sections to show new Seatbelt Alerts field added to trip history and statistics.
1.01	06/05/2022	Updated the audio and visual alert notification descriptions in the ADAS and DSS AI Features section. Updated the Add Vehicle instructions in VIA Fleet Vehicle Registration section. Updated the firmware upgrade and ADAS Calibration processes. Updated the descriptions in VIA Fleet Cloud Management Portal's and VIA Mobile360 App's Device Settings sections.
1.00	07/01/2022	Initial release

Table of Contents

1. VIA Mobile360 M800 Introduction

This Quick Start Guide provides instructions on how to boot from the Linux EVK system image on the VIA Mobile360 M800 Video Telematics System and configure the supported hardware functions in the build. It also provides explicit instructions on how to set up and use the VIA Mobile360 M800 system with the VIA Fleet Cloud Management portal for the included 30-day free trial period.

Note:
The optional 4G LTE accessory kit is required to access and use the VIA Fleet Cloud Management 30-day demo.
The VIA Mobile360 ADAS Display accessory is required to check system status, receive audio and visual alerts, create driver alerts and request 2-way calls.
Refer to the VIA Mobile360 M800 User Manual for detailed installation instructions.

1.1 EVK Package Content

There are two folders in the package listed as below.

Document Folder	Description
VIA_Mobile360_M800_EVK_Quick_Start_Guide.pdf	VIA Mobile360 M800 EVK Quick Start Guide
VIA_Fleet_Cloud_Management_Portal_Quick_Start_Guide.pdf	VIA Fleet Cloud Management Portal Quick Start Guide
VIA_Software_License_Agreement.txt	VIA Software License Agreement
Firmware Folder	**Description**
VIA_Mobile360_M800_EVK_firmware.zip	Linux EVK system image

1.1.1 Document Folder Content

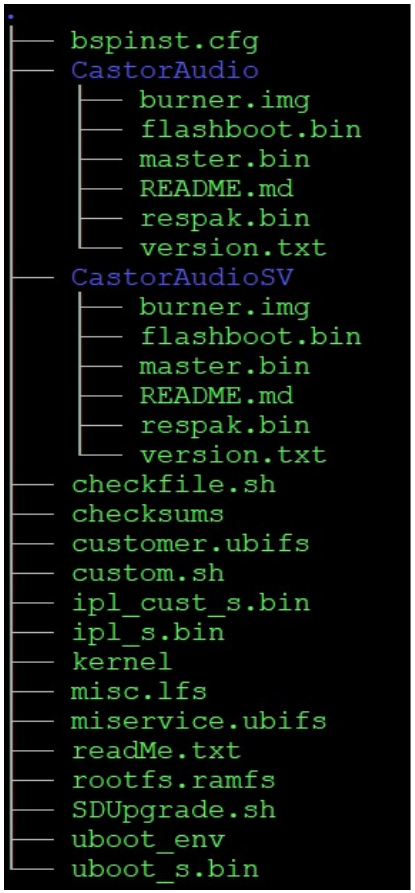
VIA_Mobile360_M800_EVK_Quick_Start_Guide.pdf: This document provides instructions on how to boot from the Linux EVK system image on the VIA Mobile360 M800 system and configure the supported hardware functions in the build including connecting with the VIA Fleet Cloud Management Portal.

VIA_Fleet_Cloud_Management_Portal_Quick_Start_Guide.pdf: This document provides an overview of the VIA Fleet Cloud Management Portal and instructions on how to set up a supported VIA Mobile360 Series platform for the free trial period to evaluate the respective system.

VIA_Software_License_Agreement.txt: Receiving this package indicates your acceptance of the terms detailed in the VIA Software License Agreement. If you do not agree with any of the terms and conditions, do not continue to use the software included.

1.1.2 Firmware Folder Content

The VIA_Mobile360_M800_EVK_firmware.zip file includes these files to install on the VIA Mobile360 M800 system for evaluation.



1.2 VIA Mobile360 ADAS Display

The VIA Mobile360 ADAS Display is required for timely delivery of visual and audio alerts to drivers. It is equipped with an LED display panel, an echo-canceling microphone array, a 2W speaker and a driver alert/two-way calling button.

Note:
Refer to the VIA Mobile360 M800 User Manual for detailed installation instructions.

2. Upgrade Firmware Using SD Card

To upgrade the firmware with a MicroSD card, follow the steps listed below:

1. Format the MicroSD Card with the exFAT file system, then extract and copy all files from the VIA_Mobile360_M800_EVK_firmware.zip file to the MicroSD Card. Insert the MicroSD Card into the MicroSD slot of the VIA Mobile360 M800 system.
2. Once powered on, the VIA Mobile360 M800 system will automatically start upgrading the system firmware.

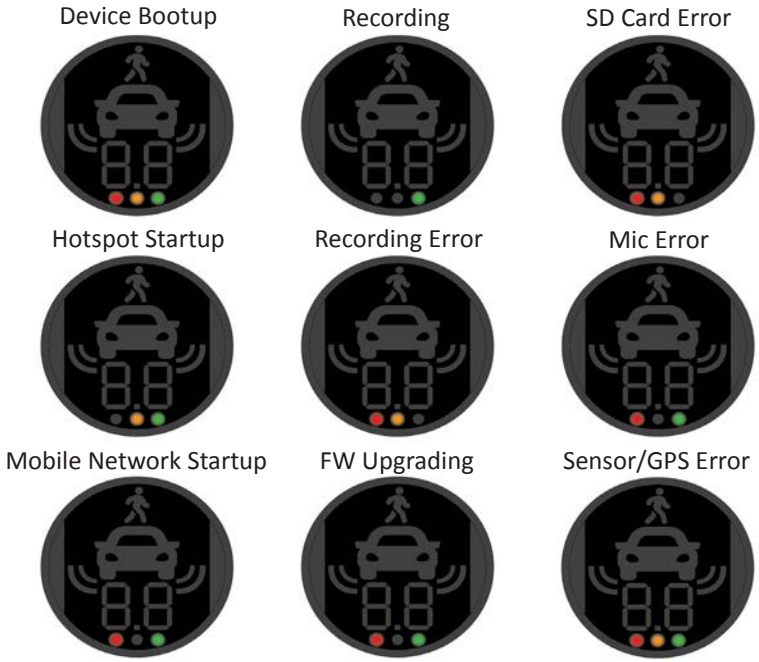
Notes:
The VIA Mobile360 ADAS Display accessory is required to check system status. Refer to section 2.1 below for detailed system status LED information.
During the upgrade process, the Red LED will flash twice per second, the Yellow LED will be off, and the Green LED will remain on.

3. When the upgrade process is completed, the system will automatically restart. While the system is booting the red, yellow, and green LEDs will flash once per second.

4. Once the system boot has completed, the system status LEDs will change according to the recording status of the VIA Mobile360 M800 system. This also indicates that the firmware upgrade process has completed.

2.1 System Status LEDs

The VIA Mobile360 ADAS Display accessory has three LED indicators located in its front LED panel to display system status.



- Device Boot Up - All three LEDs flashing at 1Hz
- Recording - Solid green LED
- SD Error - Red and yellow LEDs flashing at 1Hz
- Hotspot Startup - Yellow LED flashing at 1Hz and solid green LED
- Recording Error - Solid red and yellow LEDs
- Mic Error - Red LED flashing at 1Hz and solid green LED
- Mobile Network Startup - Red LED flashing at 10Hz and solid green LED
- Firmware Upgrading - Red LED flashing at 2Hz and solid green LED
- Sensor/GPS Error - Red and yellow LEDs flashing at 1Hz and solid green LED

3. VIA Fleet Cloud Management Portal

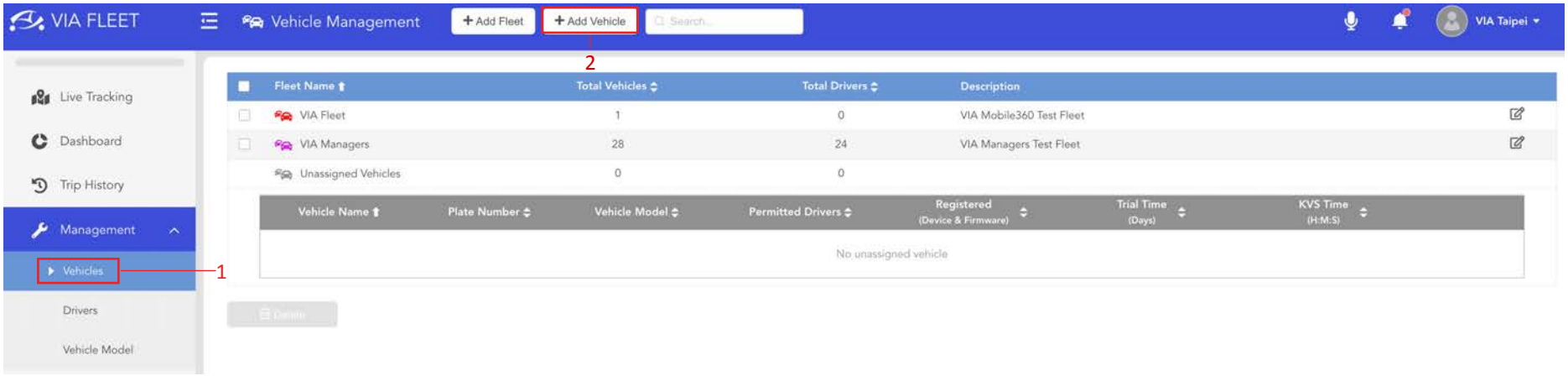
VIA Fleet Cloud Management Portal is VIA's web-based application built on AWS IoT Core and AWS KVS, which allows customers to quickly evaluate VIA Mobile360 M800 Video Telematics systems. Each sample system comes with a 30-day trial period of the VIA Fleet Cloud Management for customers to evaluate the VIA Mobile360 M800 including real-time tracking, collision alerts with video upload, trip history and fleet statistics. Also included is 50 hours of live streaming with Amazon KVS.

Please refer to the VIA Fleet Cloud Management Portal Quick Start Guide for complete instructions on how to login in and set up the free trial period for a VIA Mobile360 M800 system. The sections below will explain the specific steps related to binding a VIA Mobile360 M800 system as well as how to calibrate and enable the available AI functions.

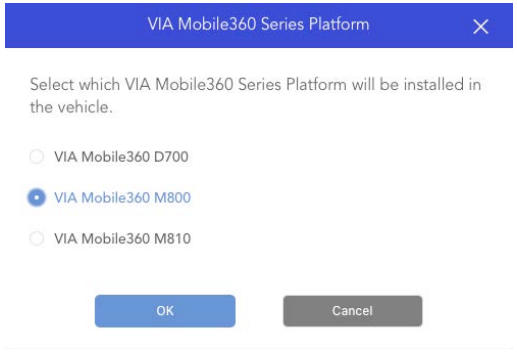
3.1 VIA Fleet Vehicle Registration

After creating a fleet and a vehicle model as described in section 1.3.1 of the VIA Fleet Cloud Management Portal Quick Start Guide, the next step is to add a vehicle in which the VIA Mobile360 M800 system will be installed.

1. From the left-hand menu, select "Management -> Vehicles".
2. From the top menu bar, select "Add Vehicle" to register a new vehicle to the new fleet group created.

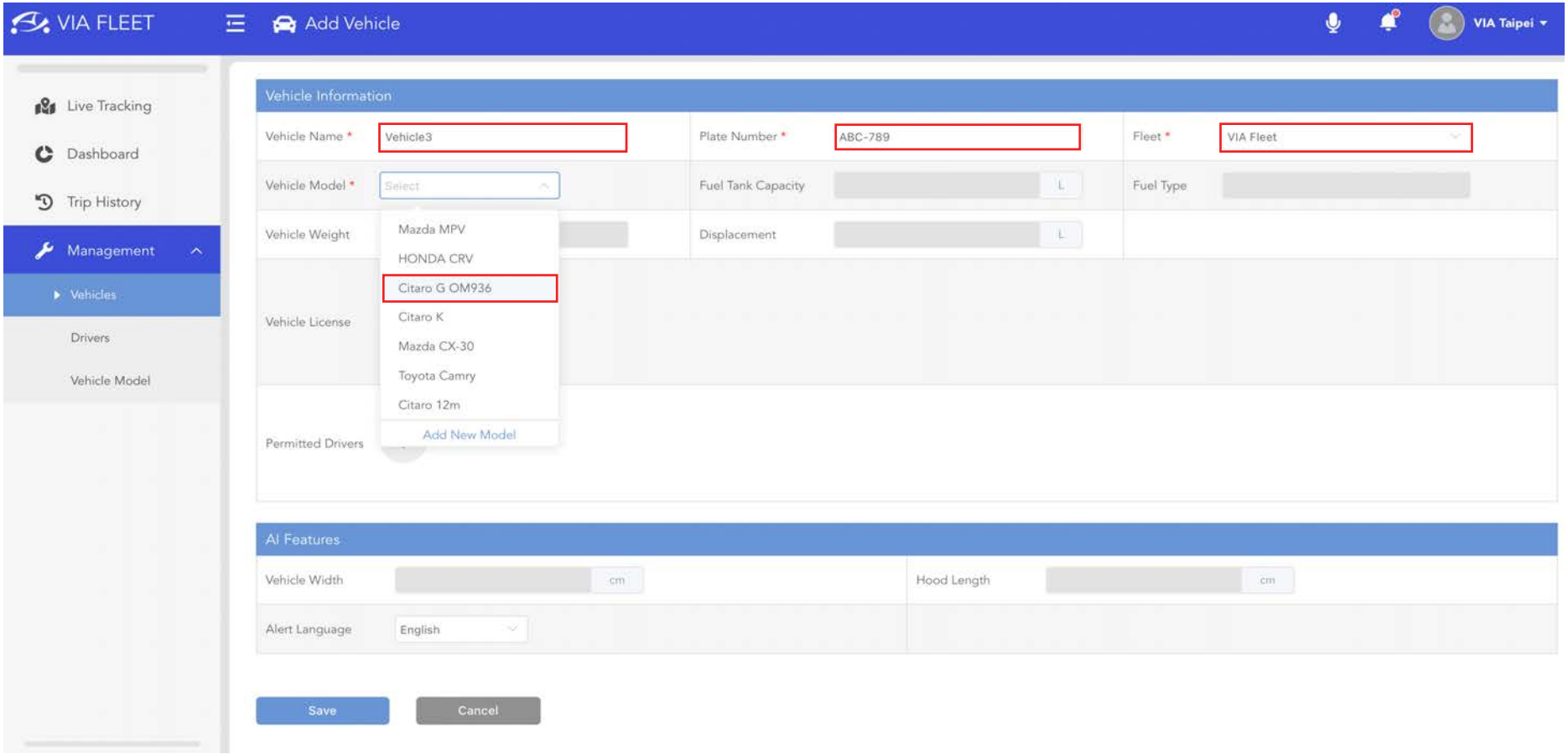


3. Select "VIA Mobile360 M800" as the VIA Mobile360 Series Platform to be installed and click "OK".



4. Fill in the information for the new vehicle including:
   - Vehicle Name - Used to identify the vehicle throughout the VIA Fleet Cloud Management Portal.
   - Plate Number - The license plate number of the vehicle the VIA Mobile360 M800 system is installed in.
   - Fleet - Select the “Fleet” created in step 3 of section 1.3.1 in the VIA Fleet Cloud Management Portal Quick Start Guide.
   - Vehicle Model - Select the vehicle model (mandatory) created in steps 5 - 8 of section 1.3.1 in the VIA Fleet Cloud Management Portal Quick Start Guide.

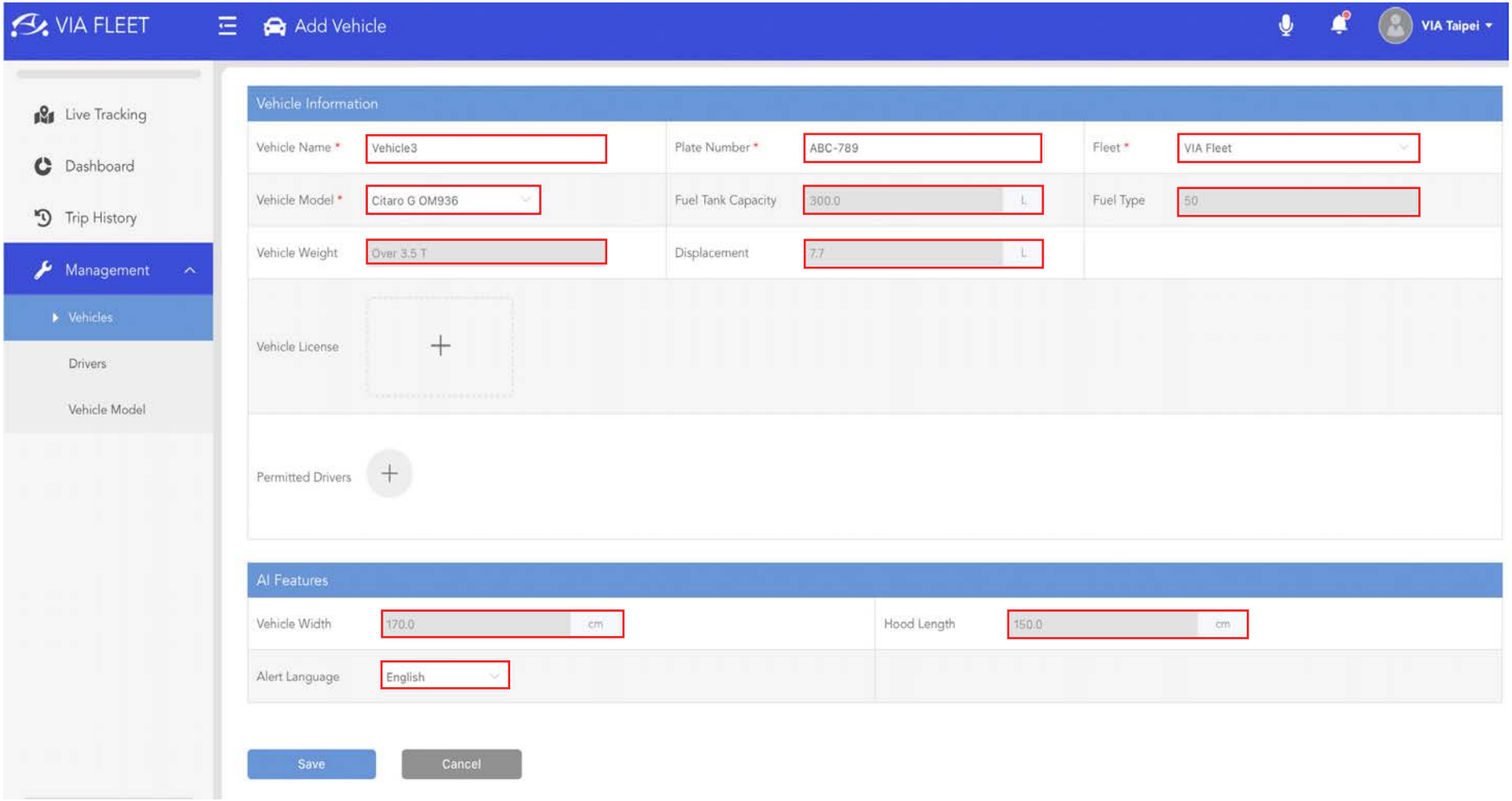
Note:
When a vehicle model is selected, the fields for "Fuel Tank Capacity", "Fuel Type", "Vehicle Weight", "Displacement", "Vehicle Width" and "Hood Length" will automatically be filled in.



- Vehicle License - Image of the vehicle registration document (not mandatory).
- Permitted Drivers - Drivers must be created before adding permitted drivers for the vehicle.

• AI Features

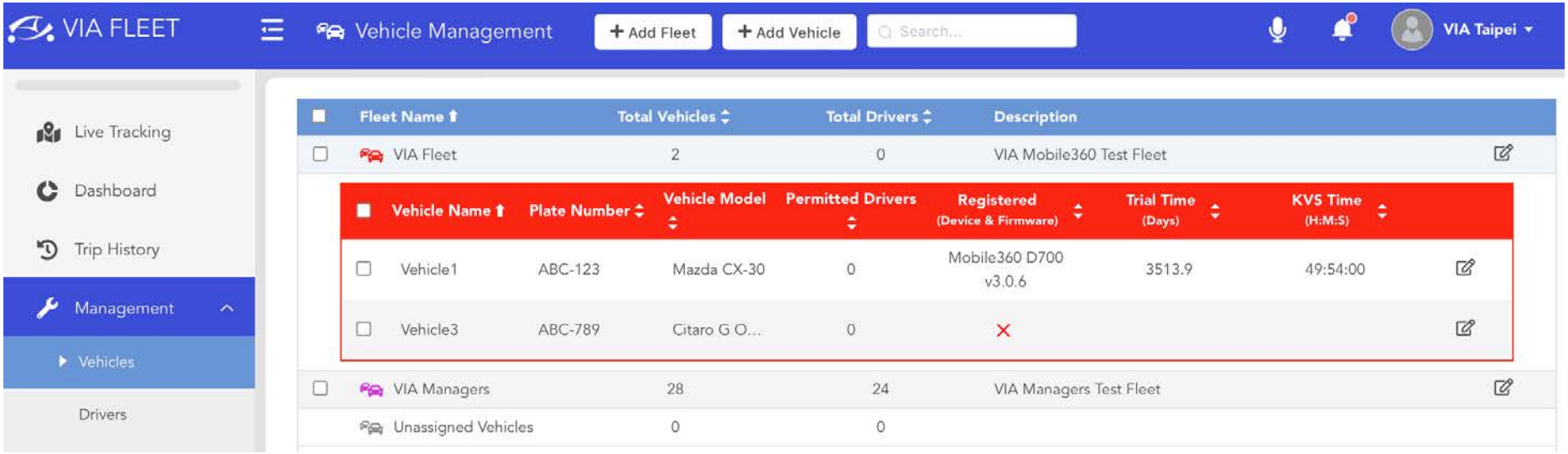
- Alert Language: Select the language the audio alerts should be played in (English, Japanese, Traditional Chinese and Simplified Chinese are supported).



Note:
Values in "Vehicle Width" and "Hood Length" fields are required for LDW, FCW and DSS AI features to work correctly.

5. Click “Save” to register the vehicle.

6. After clicking “Save”, the program will return to the “Management -> Vehicles” page. Click the Fleet name and it will expand to show the vehicle has been added to the fleet.



3.2 VIA Mobile360 M800 System Registration

Before registering a VIA Mobile360 M800 system to the vehicle created in the section above, install the system in the vehicle. It is recommended to use the J1939 cable in the standard package (or the optional OBD II cable available separately) to get all vehicle and trip information. A 4G SIM card is also required to be installed for use with the optional 4G LTE accessory kit available separately. Refer to the VIA Mobile360 M800 User Manual for detailed installation instructions.

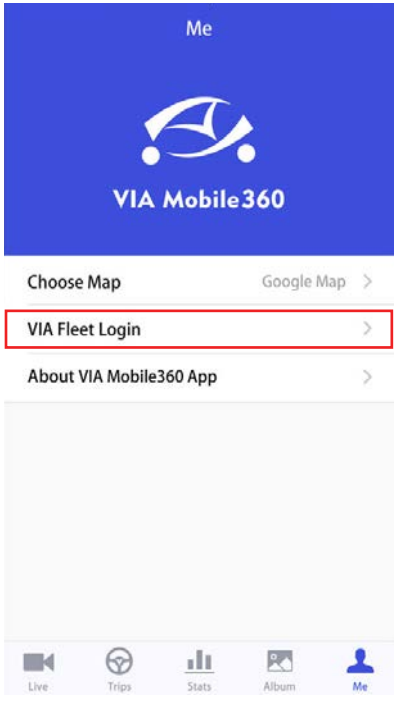
After installation is complete, follow the steps below to register the VIA Mobile360 M800 system to the VIA Fleet Cloud Management Portal.

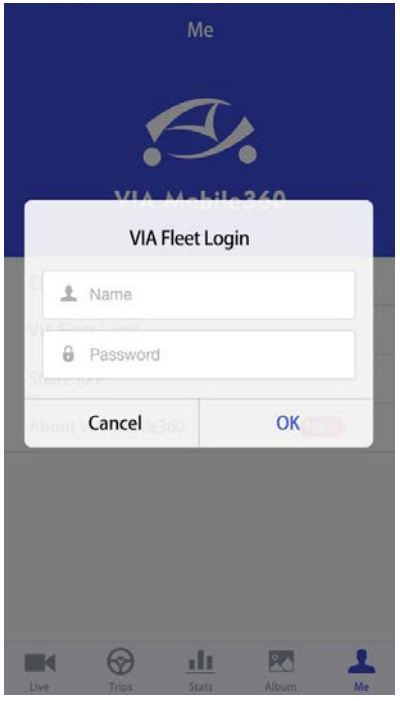
1. Scan the appropriate QR code below to download the VIA Mobile360 app from the Google Play Store for Android devices or the App Store for iOS devices.

Get it on Google play

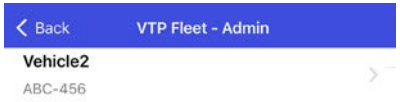
Available on the App Store

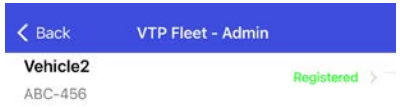
2. After installation is complete, launch the app.





3. Select “Me” from the bottom row of icons in the app.
4. Select “VIA Fleet Login”.
5. Input the same Username and Password provided for the VIA Fleet Cloud Management Portal to login and tap on “OK”.
6. Select "Vehicle Binding" to display the list of all vehicles created in your VIA Fleet Cloud Management account.





7. Start the vehicle to power on the VIA Mobile360 M800 system. After the system finishes booting there will be a short beep followed by the notification “Scan registration QR code.” After the audio notification, there is a 60-second window to scan the QR code from the app.
8. In the app, tap on the vehicle in the list to generate a QR code that is used to bind the system.
9. Place the QR code in front of the driver camera lens of the VIA Mobile360 M800 system.
10. Once the system has scanned the QR code the system will play the audio confirmation, “Registration successful”.
11. Tap on “OK” on the pop-up notification to return to the vehicle list where it will show “Registered” beside the vehicle name.

Notes:
The VIA Mobile360 ADAS Display accessory is required to see and hear system alerts. Refer to the VIA Mobile360 M800 User Manual for detailed installation instructions.
If the QR code is not successfully scanned within the 60-second window, the VIA Mobile360 M800 system will play the audio notification “Registration Failed”. If this occurs, reboot the system and start over.

12. Log back into the VIA Fleet Cloud Management Portal and go to “Management -> Vehicles”. Click the Fleet in the list and select the vehicle which was registered. There will be three new sections of vehicle information added to the vehicle information page.

Device Information - Displays information about the VIA Mobile360 M800 system bound to the vehicle:

- Device Model - The model of the system bound to the vehicle, Mobile360 M800.
- Registered - A green check mark indicates that the vehicle has a system bound to it. To unregister the system, click on the “Unregister” button displayed.
- SIM Card - Displays the SIM card number installed in the VIA Mobile360 M800 system.

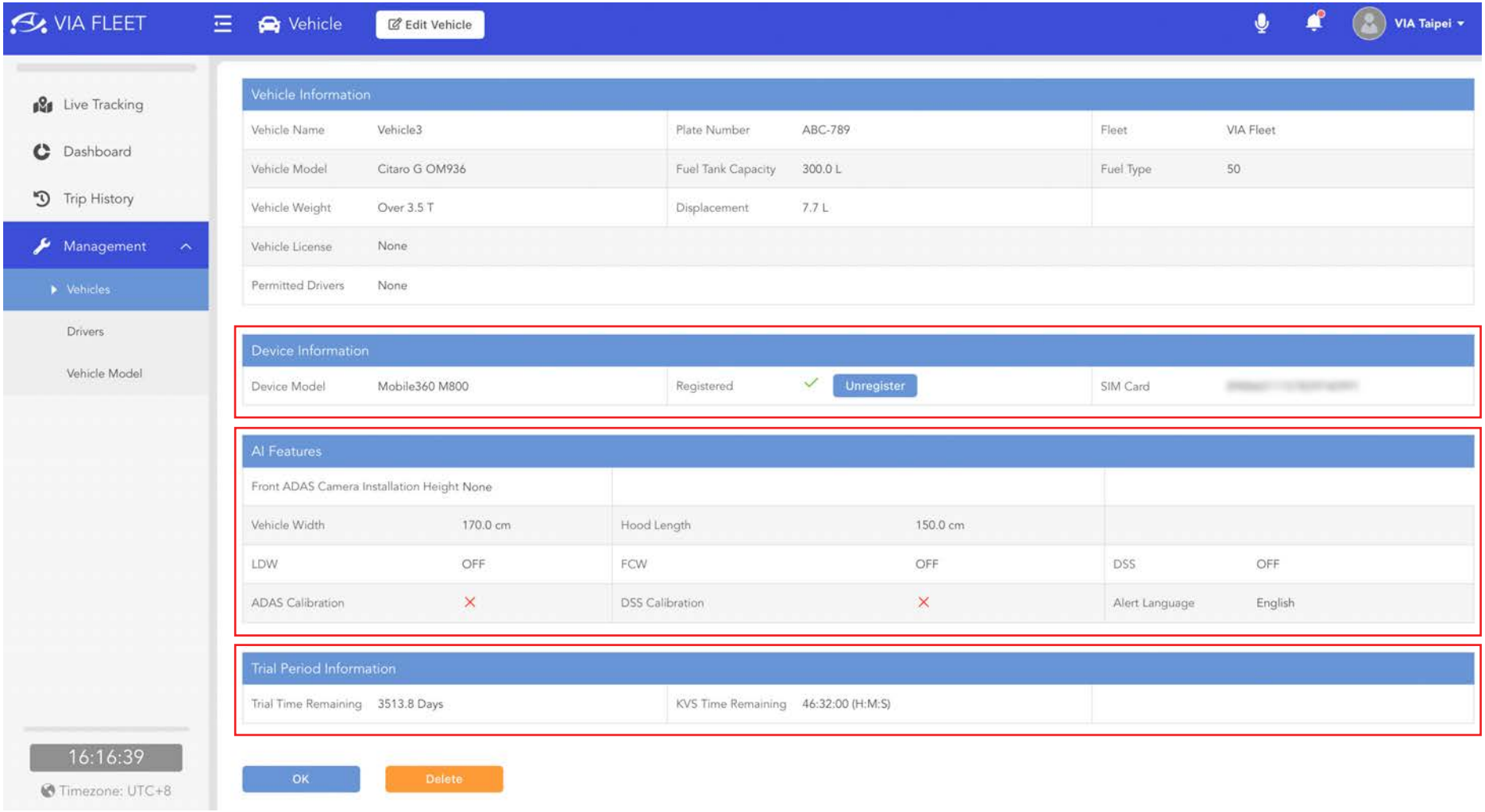
AI Features - Displays the available AI features and calibration status:

- Front ADAS Camera Installation Height - Height of the front ADAS camera measured from the ground to the front camera lens.
- LDW - Lane Departure Warning.
- FCW - Forward Collision Warning.
- DSS - Driver Safety System Warning.
- ADAS Calibration - Shows the status of ADAS calibration process completion.
- DSS Calibration - Shows the status of DSS calibration process completion.
- Alert Language - Shows the language audio alerts will be played back in.

Note:
The "Front ADAS Camera Installation Height" value can be added later in the VIA Mobile360 app for ADAS calibration.
To use the ADAS and DSS AI features, the corresponding calibration processes must be completed and the features must be activated in the cloud or with the VIA Mobile360 app.

Trial Period Information - Displays information regarding the device's trial feature period:

- Trial Time Remaining - Shows the number of days remaining to test the device with the VIA Fleet Cloud Management Portal.
- KVS Time Remaining - Shows the number of KVS live streaming hours remaining.



The image above represents the new fields added for a VIA Mobile360 M800 system.

Note:
To register more systems, repeat steps in sections 1.3.1 and 1.3.2 of the VIA Fleet Cloud Management Portal Quick Start Guide.

3.3 ADAS and DSS AI Features

The VIA Mobile360 M800 system supports configurable AI features including LDW (Lane Departure Warning), FCW (Forward Collision Warning) and DSS (Driver Safety System) warnings to assist drivers with real-time assistance notifications and for fleet owners to gain deeper insights into driver behaviors for overall fleet security.

3.3.1 Audio and Visual Alert Notifications

The VIA Mobile360 ADAS Display accessory has visual alert LED indicators located in its front LED panel to display visual alert notifications. Audio alert notifications are played through the speaker located on the rear panel of the ADAS Display.

Driver assistance audio and visual alert notifications are as described below:

AI Feature	Alarm Trigger	Audio Alert	Visual Alert	Driver Score	Trip Stats
LDW - Detected	Speed > 60km/h	“Watch your lane”	Solid white LDW LED when LDW (left/ right) detected	✗	✓
FCW - Detected	Low: 2.7s > TTC > 0.8s Medium: 2.7s > TTC > 1.0s High: 2.7s > TTC > 1.2s	None	Solid green LED (vehicle or person) and TTC displayed when TTC is less than or equal to 2.7 seconds	✗	✓
FCW - Warning	Low: 0.8s > TTC > 0.4s Medium: 1.0s > TTC > 0.6s High: 1.2s > TTC > 0.8s	“Too close”	Solid red LED (vehicle or person) and the TTC is within the defined FCW warning period	✗	✗
FCW - Critical	Low: TTC < 0.4s Medium: TTC < 0.6s High: TTC < 0.8s	Repeated audio alert beep	Solid red LED (vehicle or person) with outer red circle flashing at 3Hz and the TTC is less than the minimum FCW warning time	✓	✓
Distracted Driving	Speed > 30km/h	"Pay attention”	None	✗	✓
Driver Fatigue	Speed > 0km/h	"Pay attention”	None	✓	✓
Phone Usage	Speed > 0km/h	"Stop using your phone”	None	✓	✓
Smoking	Speed > 0km/h	"Stop smoking”	None	✓	✓
Driver Camera View Blocked	Speed > 0km/h	"Driver camera obscured”	None	✗	✗

Forward Collision Warning Visual Alerts

FCW - Detected

FCW - Warning

FCW - Critical

Lane Departure Warning Visual Alerts

LDW - Left LDW - Right

Before an AI feature can be enabled for a system in the VIA Fleet Cloud Management Portal, the corresponding calibration process must be completed through the VIA Mobile360 App.

- ADAS Calibration - Calibrates the device to ensure accurate LDW and FCW event detections
- DSS Calibration - Ensures proper camera position for accurate DSS event detections

Note:
If the vehicle speed cannot be obtained from the vehicle directly, the speed will be calculated using the GPS sensor, which is less accurate.

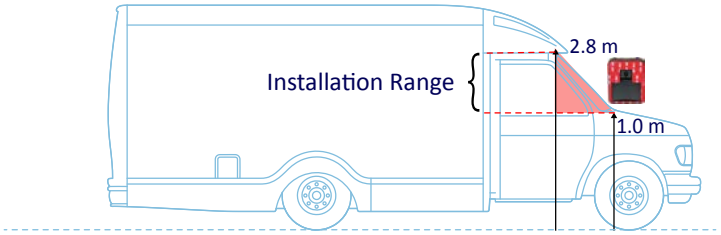
3.3.2 Installation with AI Features

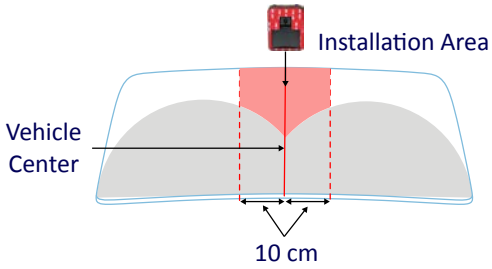
To increase the accuracy of the FCW and LDW detection results, the installation guidelines below should be followed.

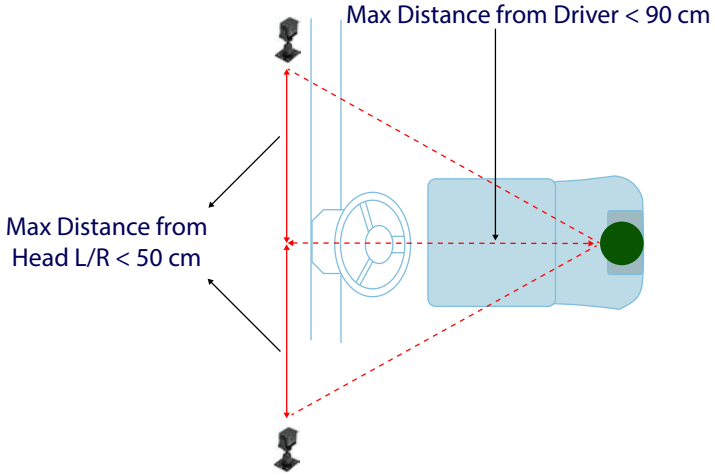
- The VIA Mobile360 M800 system's front ADAS camera should be installed in the center of the windshield with a tolerance of +/- 10cm to either side of the camera lens.
- The installation height of the front ADAS camera should be between 1.0m ~ 2.8m off the ground.
- The front ADAS camera's lens should not be obstructed by the windshield wipers of the vehicle.
- It is recommended to connect the VIA Mobile360 M800 system to the J1939 port (or the OBD II port using the optional cable available separately) in the vehicle to get the real vehicle speed. This is a critical input to determine the TTC (Time to Collision) for the FCW warning.
- For DSS, the driver camera should be no further than 90cm in front of the driver and no further than 10cm below or 30cm above the middle of the driver's face. Finally, the camera should be positioned no further than 50cm to either side of the driver's face (measured from the center of the face). See the table below for a quick reference for optimal results based on different installation locations:

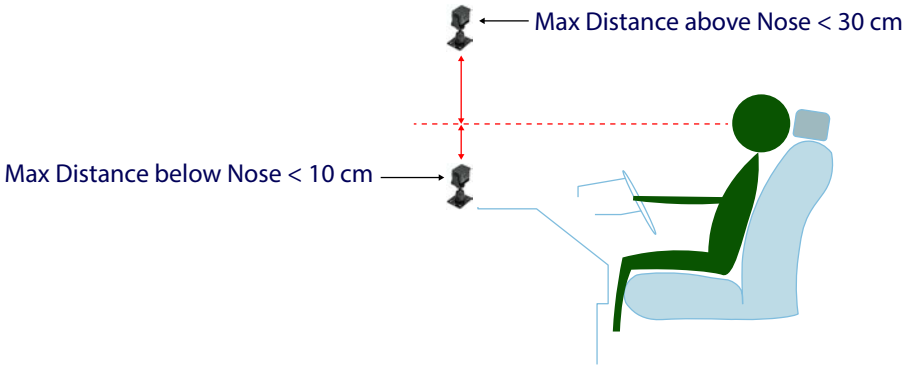
Distance to Driver	30 cm	40 cm	50 cm	60 cm	70 cm	80 cm	90 cm
Max. Offset from Driver	17 cm	23 cm	29 cm	35 cm	40 cm	46 cm	50 cm

Note:
If the above criteria for driver camera installation cannot be met, make sure the driver's head fits in the target overlay in the VIA Mobile360 app during the calibration process to ensure reliable detection. See section 3.3.4 below.









To calibrate the system for the ADAS and DSS features, the VIA Mobile360 app must be connected to the target VIA Mobile360 M800 system.

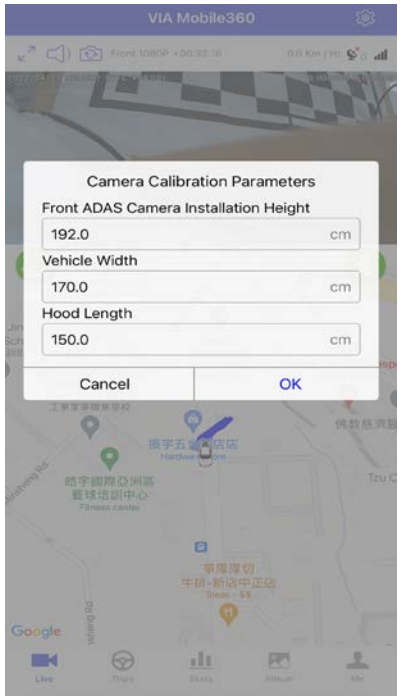
Open the VIA Mobile360 app on your mobile device and follow the prompts to connect to the VIA Mobile360 M800 system over Wi-Fi. The VIA Mobile360 M800 system's Wi-Fi SSID is named “VIA_M800_XXXX” and can be found in the phone’s available Wi-Fi connections once the VIA Mobile360 M800 system has booted. The default password is “12345678”.

After the connection has been established, you will see the live camera stream and a map in the “Live” tab of the app along with the following icons, “ ” for ADAS calibration and “ ” for DSS calibration. A red icon indicates that the calibration has not yet been completed, while a green icon indicates that the calibration has been completed.

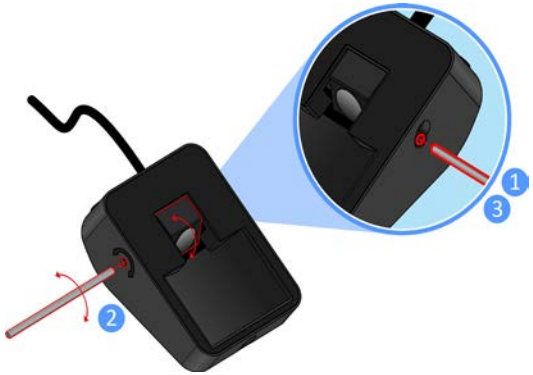
3.3.3 ADAS Calibration

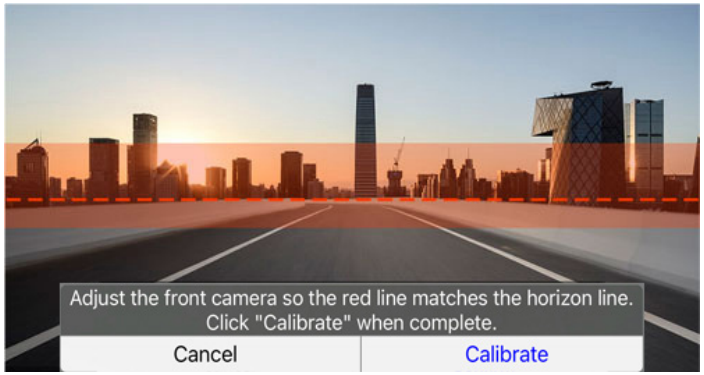
ADAS Calibration is a simple process required to calibrate the VIA Mobile360 M800 system for both FCW and LDW AI features.

1. Begin the calibration process by tapping on the red ADAS calibration icon on the left-hand side of the “Live” tab in the VIA Mobile360 app.
2. This will bring up a screen displaying the following fields: “Front ADAS Camera Installation Height”, "Vehicle Width" and "Hood Length" fields. The "Vehicle Width" and "Hood Length" fields will be pre-populated with values filled in during the vehicle creation step in section 3.1. Enter correct values and tap on the “OK” button.



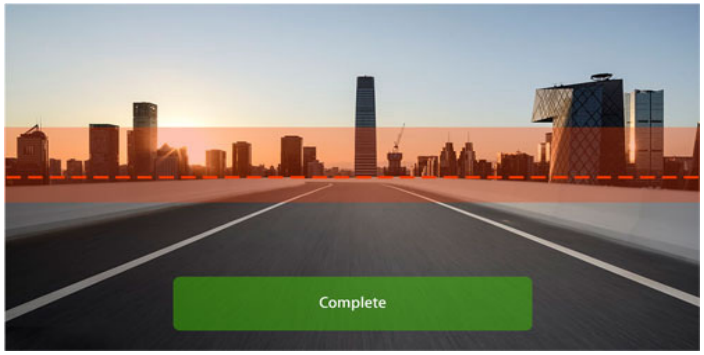
3. A live preview of the front ADAS camera with a red bar overlay will be displayed which represents the acceptable region the horizon must be in. The red line inside the bar is the horizontal centerline of the camera. Adjust the camera angle so that the red line overlays the horizon line as close as possible, and secure the camera angle by tightening the screw in the left panel.
4. After positioning the front ADAS camera correctly, tap on the “Calibrate” button to start the calibration process.





Note:
Refer to section 3.6 of the VIA Mobile360 M800 User Manual for detailed instructions on front ADAS camera installation.

5. When the calibration process is complete, a "Complete" button appears in the VIA Mobile360 app. Tap on it to return to the “Live” tab. The ADAS calibration icon will now be green, confirming the calibration process has been completed.

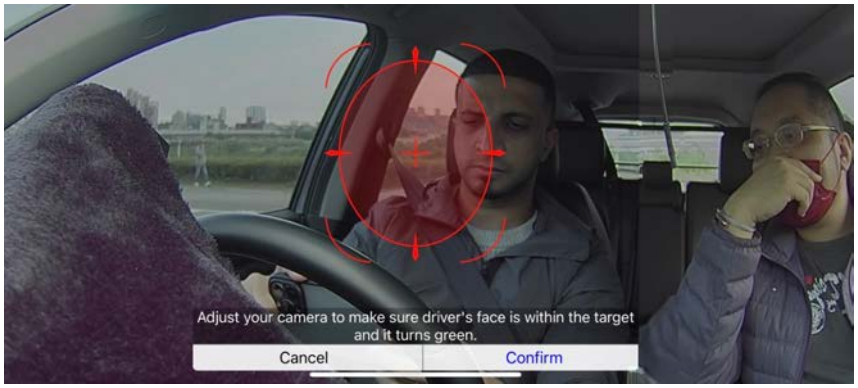


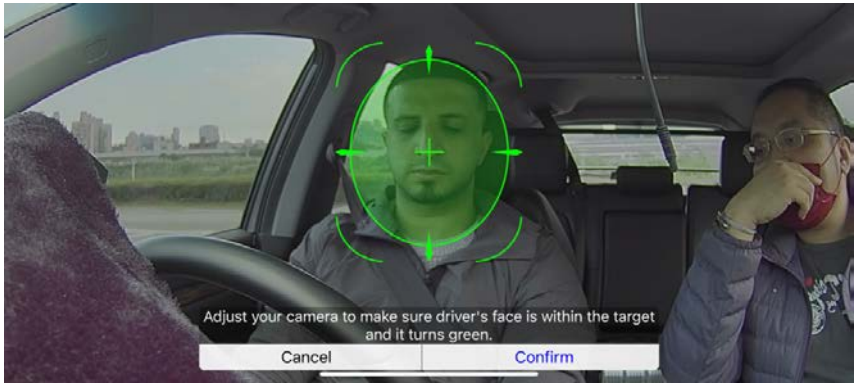
Note:
After ADAS calibration, the VIA Mobile360 M800 system will automatically run background ADAS calibration checks and improve the calibration when the vehicle is driven at a speed of at least 30 km/hr on every trip.

3.3.4 DSS Calibration

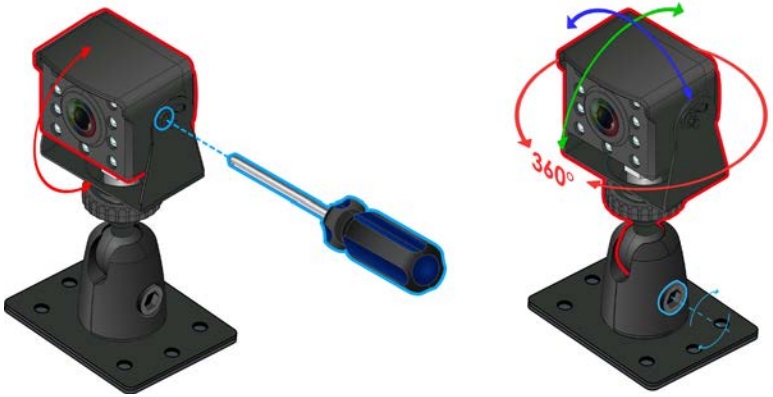
DSS calibration is required to position the driver's head and face in the focal detection area of the driver camera to ensure accurate DSS detection.

1. To begin the calibration process, tap on the red DSS calibration icon on the right-hand side of the “Live” tab in the VIA Mobile360 app. This will bring up the live view of the driver camera.
2. Have an individual sit in the driver seat of the vehicle and adjust the driver camera so that their head and face can fully fit into the target overlay in the app interface. Make sure the camera is positioned so that the view is horizontal to the ground as well.
3. The red target overlay in the app interface will turn green when the head and face are detected in the focal detection area.



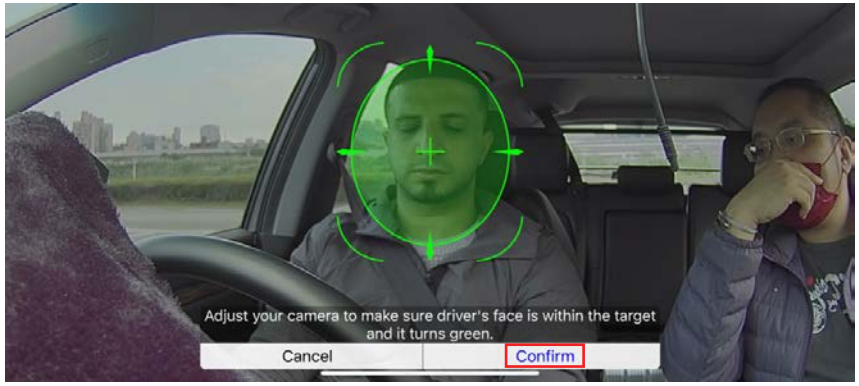


4. Secure the driver camera angle by tightening its mount's and bracket's screws.

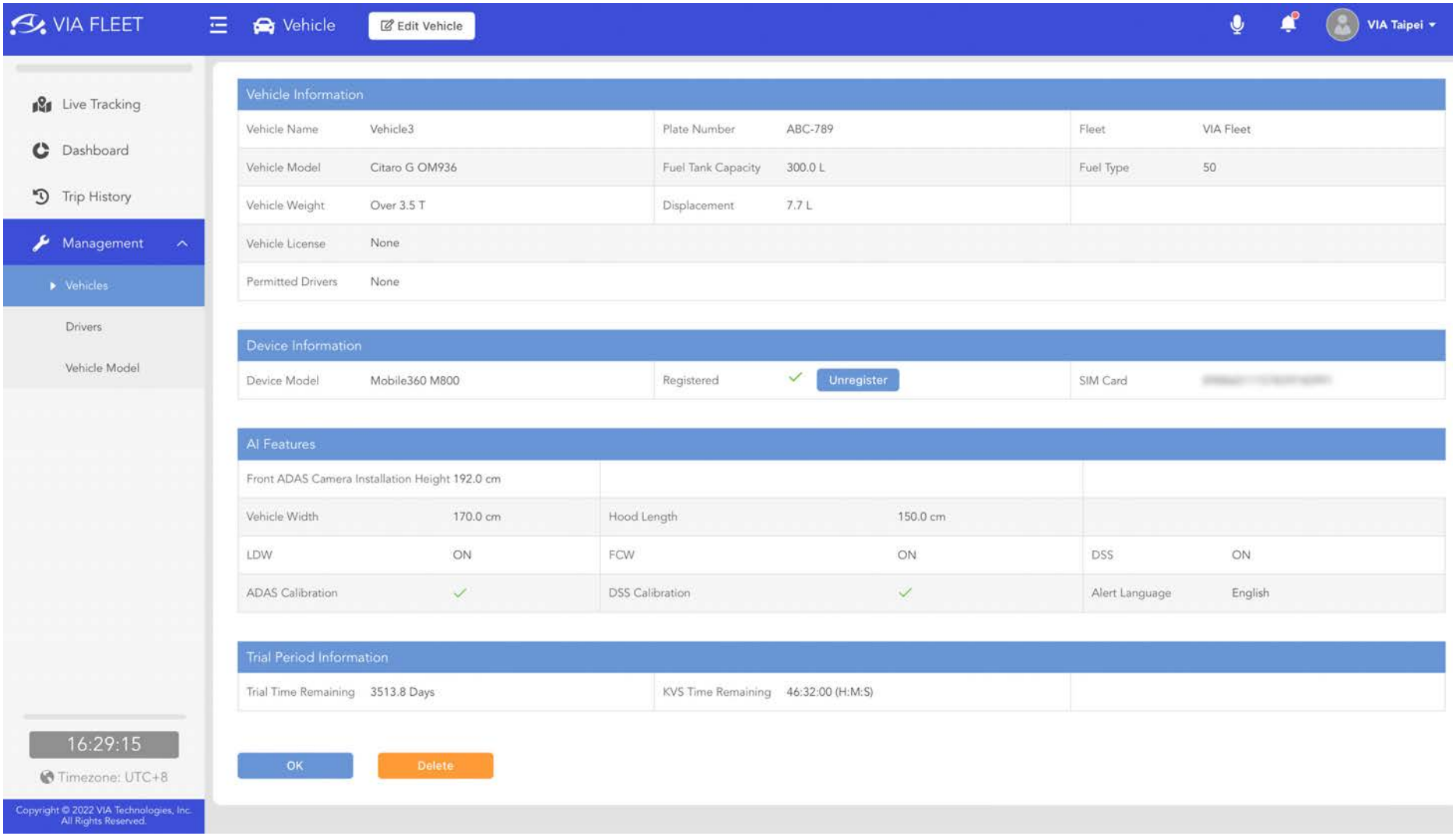


Note:
Refer to section 3.7 of the VIA Mobile360 M800 User Manual for detailed instructions on driver camera installation.

5. Tap on "Confirm" in the app to complete the driver camera calibration and to return to the “Live” tab in the app. The DSS calibration icon will now be green, confirming that the calibration has been completed.

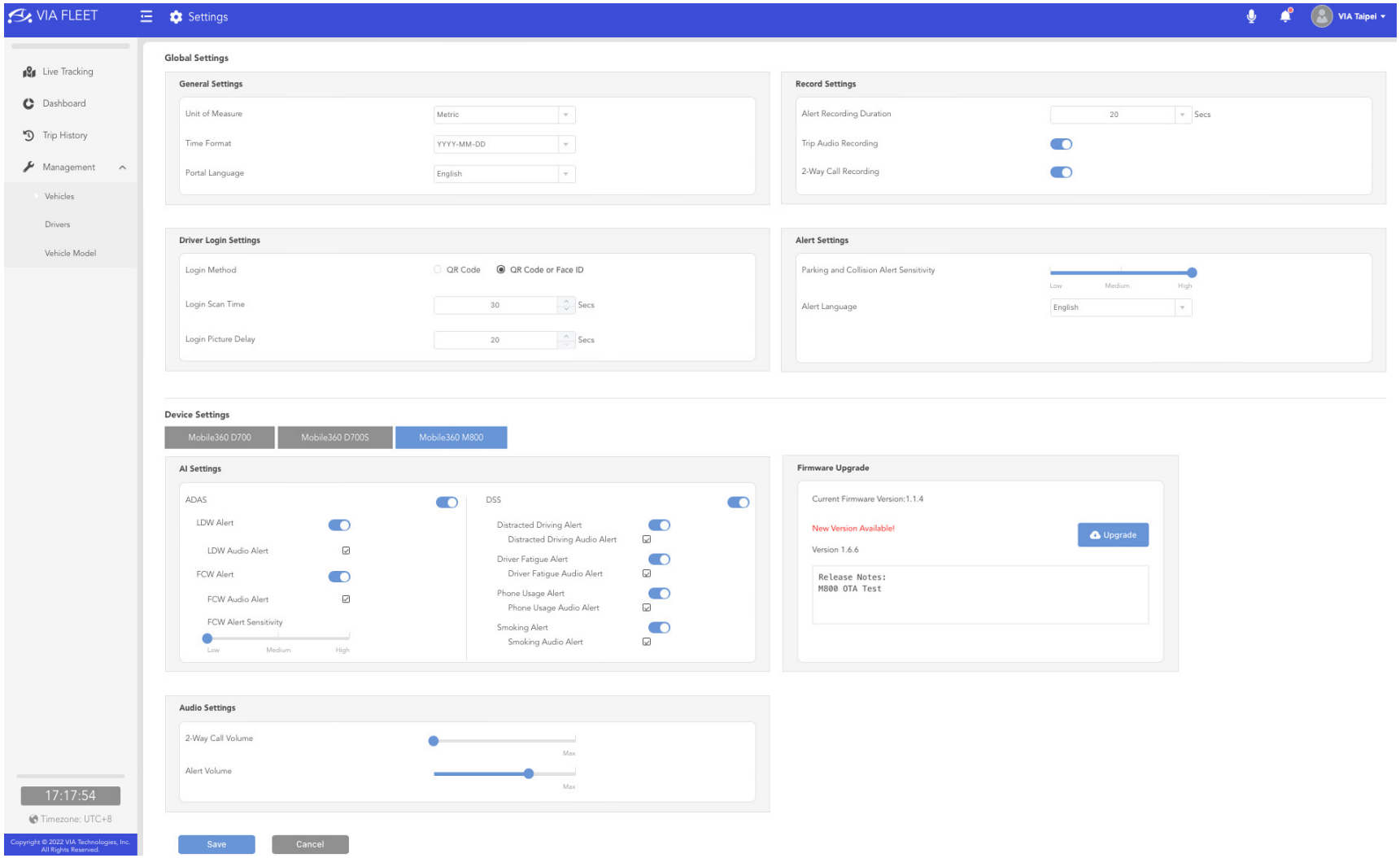


After completion of the ADAS and DSS calibration, go back to the VIA Fleet Cloud Management Portal and select the vehicle. The ADAS and DSS calibration fields will show a green check mark indicating that the calibration has been completed for the device. ADAS and DSS AI features can now be used on the VIA Mobile360 M800 system if they are activated on the cloud or in the VIA Mobile360 app for the vehicle.



3.4 Device Settings

The “System Settings” page allows universal settings to be configured for all VIA Mobile360 Series devices registered to an account in the VIA Fleet Cloud Management Portal.



In the bottom half of the Settings popup window, tabs for each available VIA Mobile360 Series device will be shown which contain settings specific for each system. Click on the Mobile360 M800 tab to set the default values for all registered VIA Mobile360 M800 systems.

Mobile360 M800 Device Settings:

- AI Settings:
  - ADAS - Enable or disable all ADAS functions as default settings from the cloud after completing ADAS calibration on a VIA Mobile360 M800 system.
    - ADAS Alerts - Enable or disable corresponding alerts for LDW and FCW events.
    - ADAS Audio Alerts - Enable or disable corresponding audio alerts for LDW and FCW events.
    - FCW Alert Sensitivity - Adjust FCW alert sensitivity between low, medium and high.
  - DSS - Enable or disable all DSS functions as default settings from the cloud after completing DSS calibration on a VIA Mobile360 M800 system.
    - DSS Alerts - Enable or disable corresponding alerts for Distracted Driving, Driver Fatigue, Phone Usage or Smoking events.
    - DSS Audio Alerts - Enable or disable corresponding audio alerts for Distracted Driving, Driver Fatigue, Phone Usage or Smoking events.
- Audio Settings:
  - 2-Way Call Volume - Adjust the volume for 2-way calls. There are 5 settings between the minimum and maximum volumes. Where min=0% and max=100%.
  - Alert Volume - Adjust the volume level for alert notifications. There are 5 settings between the minimum and maximum volumes. Where min=0% and max=100%.
- Firmware Upgrade - Displays the current firmware version deployed to all VIA Mobile360 M800 systems.

After making changes, click “Save”.

Note:
When the VIA Mobile360 M800 system connects to the VIA Fleet Cloud Management Portal, System Settings on cloud will override the local default settings or settings changed using the VIA Mobile360 app.
Collision, Parking and Driver Alert videos will always include audio.
The VIA Mobile360 ADAS Display accessory is required for audio playback of alert notifications and 2-way calls. Refer to the VIA Mobile360 M800 User Manual for detailed installation instructions.

4. VIA Mobile360 App

The VIA Mobile360 app for iOS and Android can be used to connect to a VIA Mobile360 M800 system to view live streaming, recorded trip videos and data on the system through a Wi-Fi connection.

Note:
A MicroSD card is required to save trip video clips and data on the VIA Mobile360 M800 system.
The optional 4G wireless module kit and a 4G SIM card are required for GPS route tracking within the map view in the app and to send data in real-time to the VIA Fleet Cloud Management Portal.

Inserting a MicroSD Card or Micro SIM Card

When inserting a MicroSD card or Micro SIM card, use your fingernail or a pin to gently push and securely insert the card into the MicroSD or SIM slot on the front panel of the VIA Mobile360 M800 system. When fully inserted, the MicroSD card or Micro SIM card will snap into the slot. To remove the MicroSD card or Micro SIM card, use your fingernail or a pin to gently push the card into the system and make it pop out, allowing it to be removed.

Note:
Please confirm that the 4G SIM card is activated and can connect to the Internet.

4.1 Connecting to the VIA Mobile360 M800 system

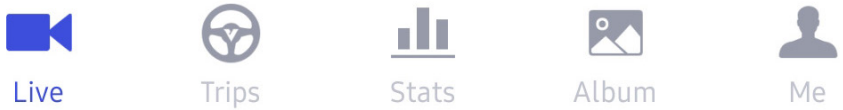
After installing the VIA Mobile360 app on a mobile device, open the app and follow the prompts to connect to the VIA Mobile360 M800 system over Wi-Fi. The VIA Mobile360 M800 system's Wi-Fi SSID is named “VIA_M800_XXXX” and can be found in the phone’s available Wi-Fi connections once the VIA Mobile360 M800 system has booted. The default password is “12345678”.

After a Wi-Fi connection has been established, the VIA Mobile360 app will display the “Live” interface.

Note:
The VIA Mobile360 app supports English, Japanese, Simplified Chinese and Traditional Chinese languages. The app will detect the language settings of your mobile device to choose which language to use. English will be displayed for all languages not listed.

4.2 App Menu

The menu for the VIA Mobile360 app is located along the bottom of the app interface and includes the 5 items described below:



- Live - View the live stream and GPS tracking of the VIA Mobile360 M800 system.
- Trips - View your trips, play back videos, and download videos to the connected mobile phone.
- Stats - Statistics about the driving status of the vehicle during the trip.
- Album - View the videos saved to the MicroSD card in the VIA Mobile360 M800 system and download the videos to the connected mobile phone.
- Me - Change map, VIA Fleet login and about VIA Mobile360 app.

4.3 Live

The “Live” interface of the VIA Mobile360 app allows real-time viewing of both cameras as well as tracking of the GPS positioning on the map below the live stream. Users can also initiate the calibration processes for the ADAS and DSS AI features. The “Live” interface is described below.

1. VIA Mobile360 M800 Device Settings
2. Full screen
3. Mute audio
4. Switch camera view
5. Trip duration
6. Current vehicle speed
7. GPS signal strength
8. 4G network signal: If there is no signal or the SIM card cannot access the Internet, the map will not be displayed
9. ADAS Calibration button (Red indicates no calibration; green indicates calibration complete)
10. DSS Calibration button (Red indicates no calibration, green indicates calibration complete)
11. Map and route tracking

Note:
GPS tracking will only keep the route tracking while on the 'Live' interface. If the app is minimized the tracking will start again when on the live page.

4.3.1 Device Settings

Tap on “Device Settings” in the “Live” interface to configure the various VIA Mobile360 M800 system parameters as described below:

Trip:

- Units - Change the units displayed in the app between Metric, Imperial and US customary.
- Alert Recording Duration - Set the recording time (10, 20 or 30 seconds) from the point of the alert trigger.
  - For collision alerts while driving or driver initiated alert videos triggered by pressing the driver alert/two-way call button, 10 seconds prior to the trigger point will be added to the alert video.
  - Parking mode collision alerts will record the time set after the system boots.
- Parking and Collision Alert Sensitivity - This is the sensitivity setting for parking and collision alerts. There are multiple sensitivity levels between high and low, where “High” makes it easier to trigger an alert and “Low” makes it harder to trigger an alert.
- Audio Recording - Turn on/off audio recording.
- Alert Volume - Adjust the volume level for alert notifications. There are 4 settings between the minimum and maximum volumes. Where min=25% and max=100%.
- 2-Way Call Volume - Adjust the volume for 2-way calls. There are 4 settings between the minimum and maximum volumes. Where min=25% and max=100%.

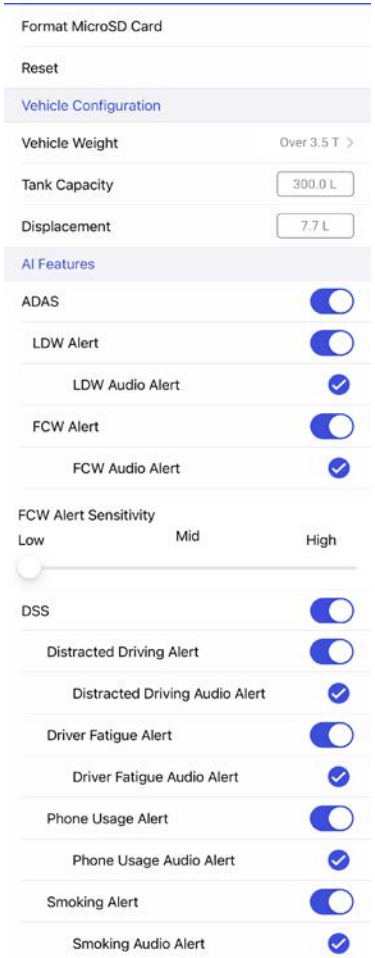
Network:

- Wi-Fi Mode - Switch the recorder’s Wi-Fi mode (need to reconnect after switching 2.4GHz/*5GHz).
- Wi-Fi Name - VIA Mobile360 M800 system Wi-Fi AP Mode SSID. Tap on to change SSID and Password.
- IP Address - IP Address of the VIA Mobile360 M800 system.
- MAC Address - MAC address of the VIA Mobile360 M800 system.

Note:
For Japanese versions of the VIA Mobile360 M800 system, only the 2.4GHz Wi-Fi band is supported.

Device:

- Device Model - Displays the model name.
- Firmware Version - Displays the firmware version installed as well as when new updates are available through OTA.
- MicroSD Card (Available/Total) - Displays the available space and total capacity of the inserted MicroSD card.



- Format MicroSD Card - Reformats the inserted MicroSD card as exFAT.
- Reset - Resets system settings back to default.

Vehicle Configuration:

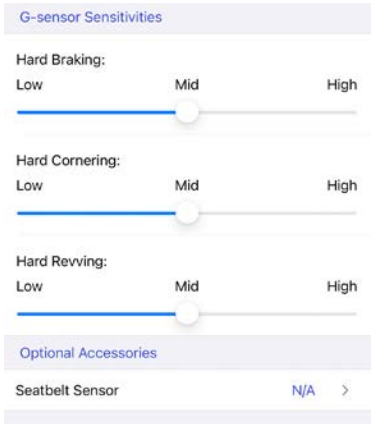
The “Vehicle Configuration” settings are used to improve the accuracy of the “Collision Alert”, “Driver Score” and fuel consumption results.

- Vehicle Weight - Select between “Under 1.8T”, “1.8T-3.5T” or “Over 3.5T” (Metric units).
- Tank Capacity - Refer to the user manual of the vehicle to insert the correct fuel tank capacity of the vehicle.
- Displacement - Refer to the user manual of the vehicle to insert the correct engine displacement value.

AI Features:

After completion of ADAS and DSS calibration on the VIA Mobile360 M800 system, ADAS and DSS functions and alerts can be enabled or disabled.

- ADAS - Enable or disable all ADAS functions after completing ADAS calibration on a VIA Mobile360 M800 system.
  - ADAS Alerts - Enable or disable corresponding alerts for LDW and FCW events.
  - ADAS Audio Alerts - Enable or disable corresponding audio alerts for LDW and FCW events.
  - FCW Alert Sensitivity - Adjust FCW alert sensitivity between low, medium and high.
- DSS - Enable or disable all DSS functions after completing DSS calibration on a VIA Mobile360 M800 system.
  - DSS Alerts - Enable or disable corresponding alerts for Distracted Driving, Driver Fatigue, Phone Usage or Smoking events.
  - DSS Audio Alerts - Enable or disable corresponding audio alerts for Distracted Driving, Driver Fatigue, Phone Usage or Smoking events.



G-Sensor Sensitivities:

Move sliders to set G-Sensor sensitivity to low, medium or high for detecting hard braking, hard cornering and hard revving. There are multiple sensitivity levels between high to low, where "High" makes it easier to detect hard braking, hard cornering or hard revving, while "Low" makes it harder to detect hard braking, hard cornering or hard revving.

Optional Accessories:

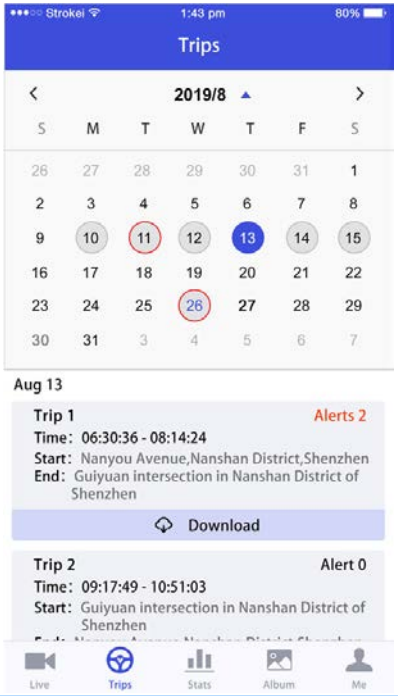
- Seatbelt Sensor - Allows pairing/unpairing, and viewing of battery life and firmware version of the wireless seatbelt sensor optional accessory.

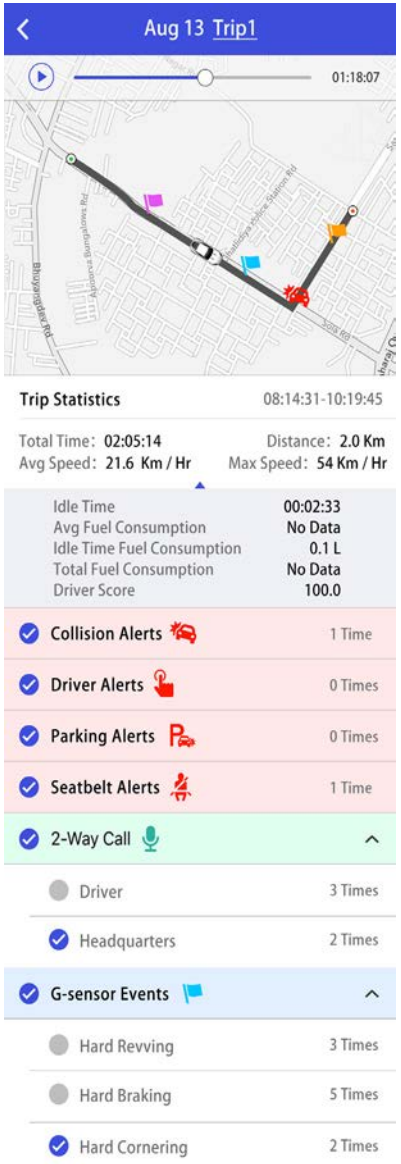
Note:
For instructions on pairing the optional wireless seatbelt sensor accessory, refer to Appendix section A.1.1.

Note:
If the system is registered to the VIA Fleet Cloud Management Portal, the cloud settings will overwrite changes made with the app the next time the system boots.

4.4 Trips

The “Trip” interface displays stored trips on the MicroSD card inserted in the VIA Mobile360 M800 system. When the VIA Mobile360 M800 system is turned on, it begins to record a trip. The recording of the trip only ends when the device is turned off. The “Trips” interface allows a user to view and downloaded trips by date. Days with trips are indicated with a blue circle around the date. A red mark below the date in the calendar indicates that a collision, parking, driver, or seatbelt alert has occurred on that date and a full blue circle indicates the current date selected.





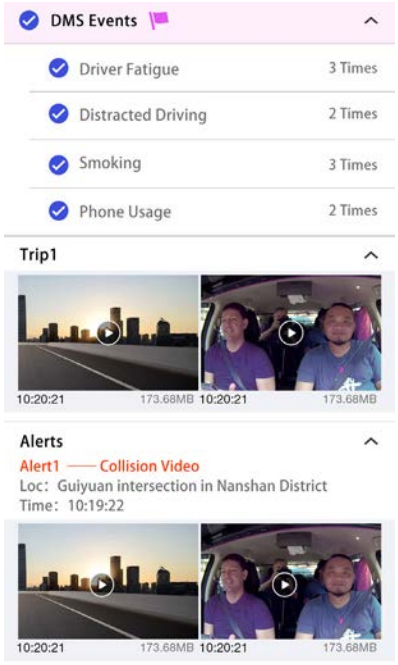
By tapping on a day in the calendar with trips, the interface will display a short summary of all trips that occurred that day including time, location, and the number of alerts occurred during the trip.

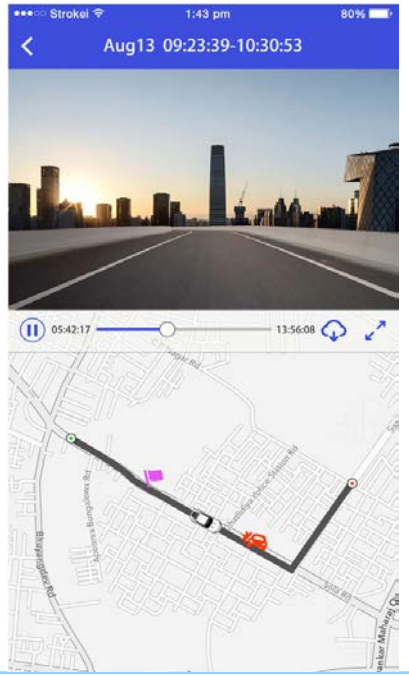
Tap on “Download” to download the trip to the connected mobile device when not connected to the VIA Mobile360 M800 system.

Tap on the trip to enter the trip details screen. The trip details show the entire route of the trip, the trip videos, collision alert videos (if any) and other information about the trip.

Tap on the trip video to play back the video. The corresponding position during the trip will be synced in the map below the video player.

Note:
You will not be able to switch to live streaming while downloading a trip.





4.5 Stats

The “Stats” interface can query the trip statistics for a selected day or an interval of time. Total stats for all trips during the selected interval will be displayed followed by each trip included in the period.

The “Stats” interface is as shown below:

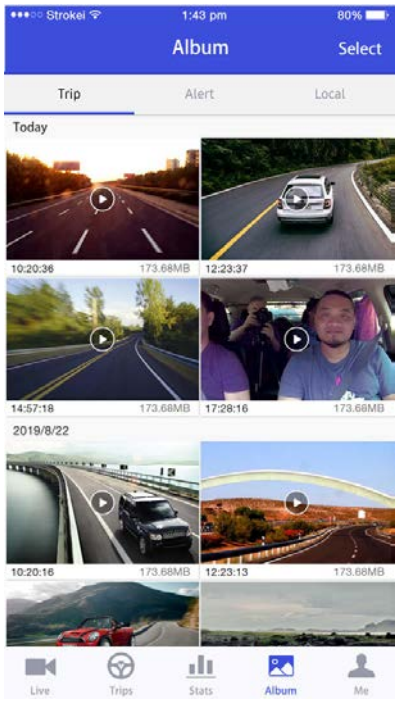
4.6 Album

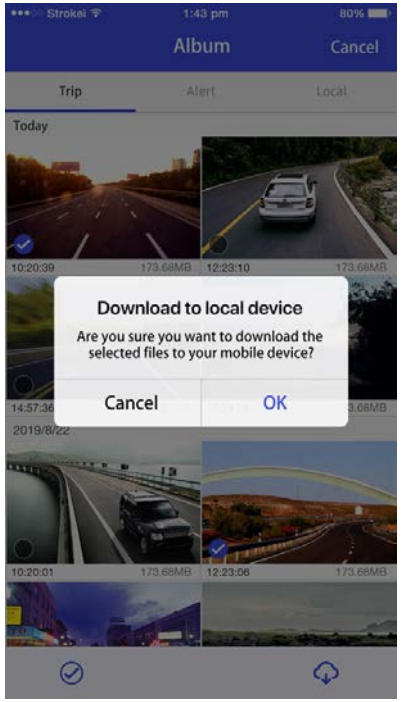
From the “Album” tab, users can playback or download videos stored on the MicroSD card, including Trip, and Alert (including collision, parking and driver alerts) videos.

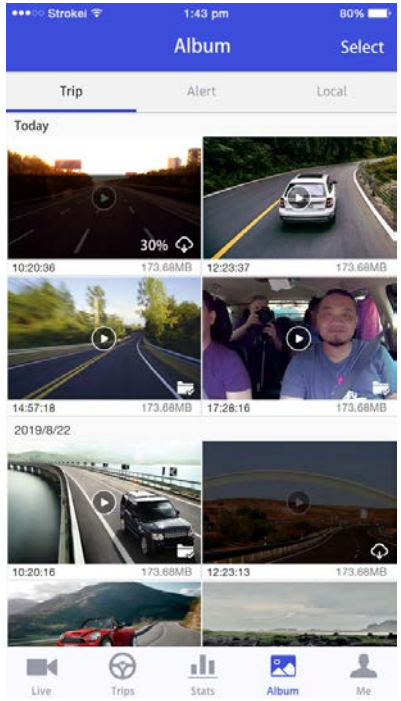
- Trip - Trip videos are recorded as 3-minute video files. When the MicroSD card runs out of space, the system will automatically delete the oldest video file and record in a cyclic manner. These can be viewed in the “Trip” tab in the Album of the VIA Mobile360 app.
- Alert - Includes collision, parking and driver alert videos. The length of the alert video will depend on the value in the settings as explained in section 4.3.1.
- Local - Videos which have been downloaded to the connected mobile device are displayed in the “Local” tab in the Album of the VIA Mobile360 app.

Tapping on a video file will begin playback.

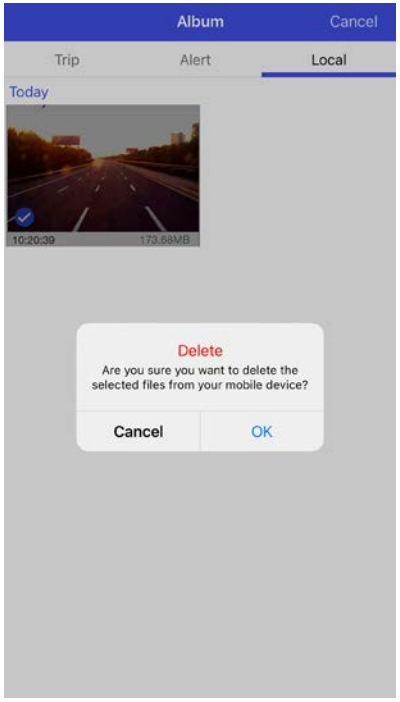
To download videos, long press on a video then a blue check mark will appear in the bottom left-hand corner of the video. Tap on “ ✓ ” in the bottom left-hand corner of the screen to select all videos or individually tap on videos to add to the download group. After selecting the videos, tap on “ ☁ ” to download them to the connected mobile device. Downloaded videos can be seen in the “Local” tab.







To delete videos from the Local tab, long press on a video then a blue check mark will appear in the bottom left-hand corner of the video. Tap on " ⊘ " in the bottom left-hand corner of the screen to select all videos or individually tap on videos to add to the delete group. After selecting the videos, tap on " 🗑 " to delete them from the connected system storage.

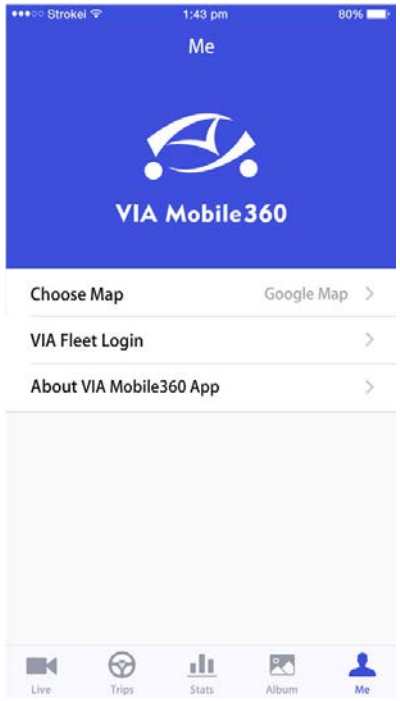


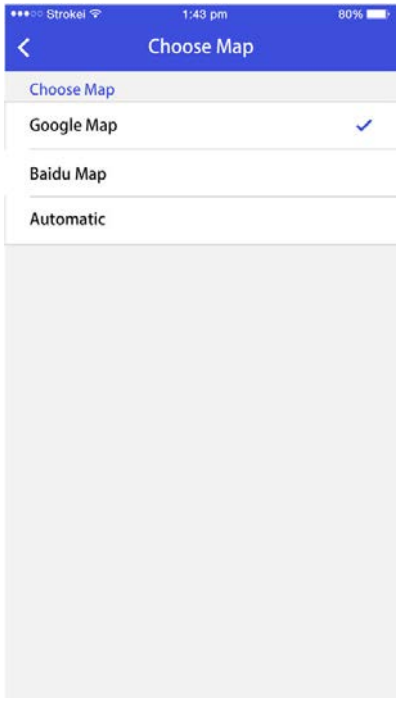
Note:
Deletion of videos from the inserted MicroSD card can only be done through a PC.

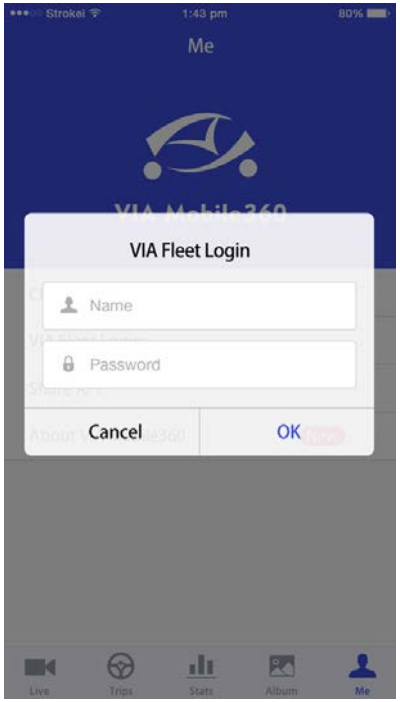
4.7 Me

The “Me” tab allows changing of map service between Google or Baidu, logging in to access VIA Fleet Cloud Management QR codes and checking of current app version. The “Me” interface is shown as below.

- Choose Map - Change the default map service used in the app to either Google or Baidu maps.
- VIA Fleet Login - Administrator or driver login portal for VIA Fleet Cloud Management.
- About VIA Mobile360 App - Shows the current version of the app installed, as well as a link to the user agreement and privacy policy.







Note:
The default selection for the map used is “Automatic” and will use Baidu maps for phones using Simplified Chinese as the system language and Google maps for all other languages.

Appendix A Optional Accessories

A.1 Seatbelt Sensor

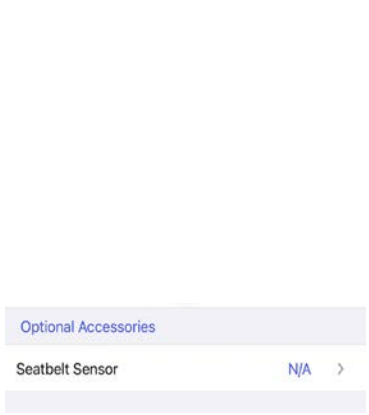
The optional wireless seatbelt sensor accessory can be used with the VIA Mobile360 M800 System to determine the fastened/unfastened status of the driver seatbelt. When the vehicle is moving at significant speed and the seatbelt is unfastened, the VIA Mobile360 M800 system plays a warning voice alert for the driver to fasten the seatbelt.

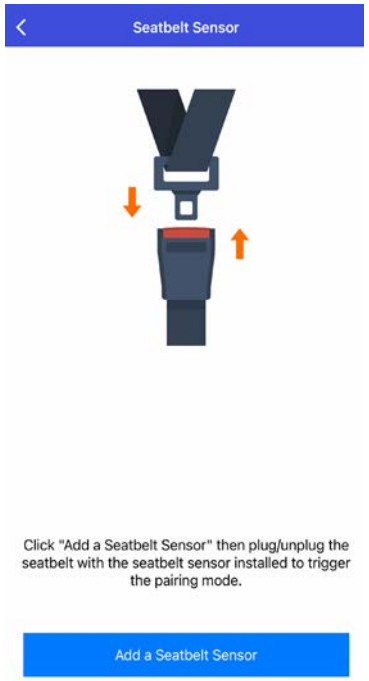
A.1.1 Pairing the Seatbelt Sensor

Refer to Appendix section B.2 of the VIA Mobile360 M800 User Manual for instructions on installing the seatbelt sensor, and follow the steps below for pairing it with the system:

1. Open the VIA Mobile360 app on a mobile device and connect to the target VIA Mobile360 M800 system as described in section 4.1.
2. Open the 'Device Settings' tab in the VIA Mobile360 app as described in section 4.3.1.

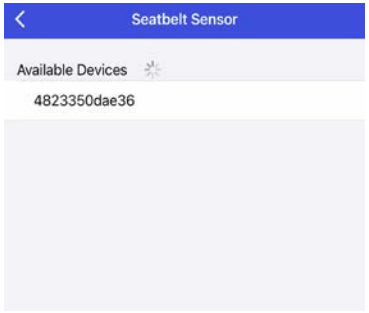
3. Find and tap the 'Seatbelt Sensor' settings in the 'Optional Accessories' section, and then tap the 'Add a Seatbelt Sensor' button on the next screen.

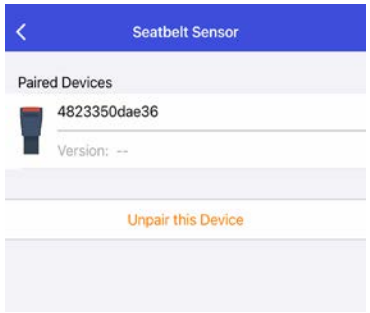


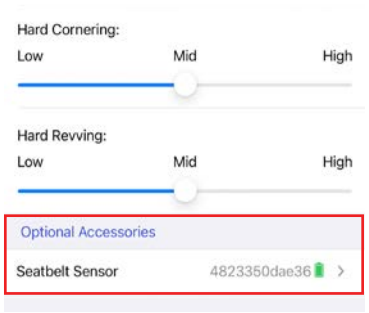


4. The VIA Mobile360 M800 System will now search for available seatbelt sensors nearby. Fasten and release the seatbelt to trigger the broadcast signal for the seatbelt sensor. The VIA Mobile360 app will now display the seatbelt sensor's MAC address in the 'Available Devices' list.
5. Tap on the MAC address of the desired seatbelt sensor within 120 seconds to bind it to the VIA Mobile360 M800 System. After successfully pairing, the seatbelt sensor's MAC address and battery status will now be displayed under 'Paired Devices'. Return to the 'Settings' screen to view the updated seatbelt sensor MAC address and battery life in the 'Optional Accessories' section.

Note:
The seatbelt sensor's MAC Address is printed on the label affixed to it.







A.1.2 Alerts

After pairing the seatbelt sensor, the VIA Mobile360 M800 system can detect the seatbelt fastened/unfastened status. If the seatbelt is unfastened when the vehicle speed is 15 km/h or more, the system then plays a voice alert up to five times, with 30-second intervals between alerts.

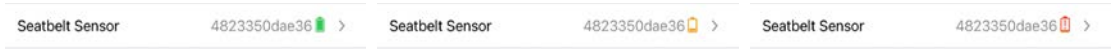
Input Detected	Voice Alert
Seatbelt Fastened	None
Seatbelt Unfastened	"Fasten your seatbelt"

The seatbelt must be fastened between 120 seconds before system boot-up and 90 seconds after system boot-up, to ensure that the system detects the seatbelt sensor is connected.

A.1.3 Checking the Battery Life

As the seatbelt sensor's battery lifespan is subject to the extent of usage, the battery life should be checked regularly to know when it is time for a replacement.

When the battery lifespan is good, the VIA Mobile360 app will display the green battery icon. When 30 days of battery lifespan are left, the yellow battery icon is displayed to indicate low level. When 7 days are left, the red battery icon is displayed to indicate very low level.

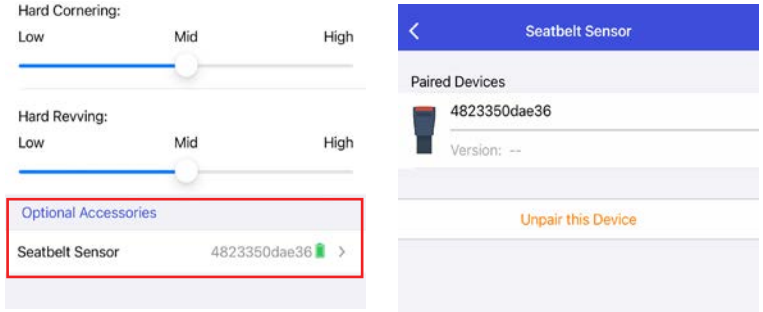


To replace the battery, refer to Appendix section B.2.1 of the VIA Mobile360 M800 User Manual.

A.1.4 Unpairing the Seatbelt Sensor

If the seatbelt sensor is no longer required, it can be unpaired. Follow the steps below to unpair the seatbelt sensor:

1. Open the VIA Mobile360 app on a mobile device and connect to the target VIA Mobile360 M800 system as described in section 4.1.
2. Open the 'Device Settings' tab in the VIA Mobile360 app to find the seatbelt sensor settings in the 'Optional Accessories' section.
3. Tap on 'Seatbelt Sensor' and then tap on 'Unpair this Device' below on the next screen. The seatbelt sensor will be unpaired.



Taiwan Headquarters

1F, 531 Zhong-zheng Road,
Xindian Dist., New Taipei City 231
Taiwan

Tel: 886-2-2218-5452
Fax: 886-2-2218-9860
Email: embedded@via.com.tw

USA

940 Mission Court
Fremont, CA 94539,
USA

Tel: 1-510-687-4688
Fax: 1-510-687-4654
Email: embedded@viatech.com

Japan

3-15-7 Ebisu MT Bldg. 6F,
Higashi, Shibuya-ku
Tokyo 150-0011
Japan

Tel: 81-3-5466-1637
Fax: 81-3-5466-1638
Email: embedded@viatech.co.jp

China

Tsinghua Science Park Bldg. 7
No. 1 Zongguancun East Road,
Haidian Dist., Beijing, 100084
China

Tel: 86-10-59852288
Fax: 86-10-59852299
Email: embedded@viatech.com.cn

Europe

Email: embedded@via-tech.eu