Carkuda (VTG500X)
User Manual
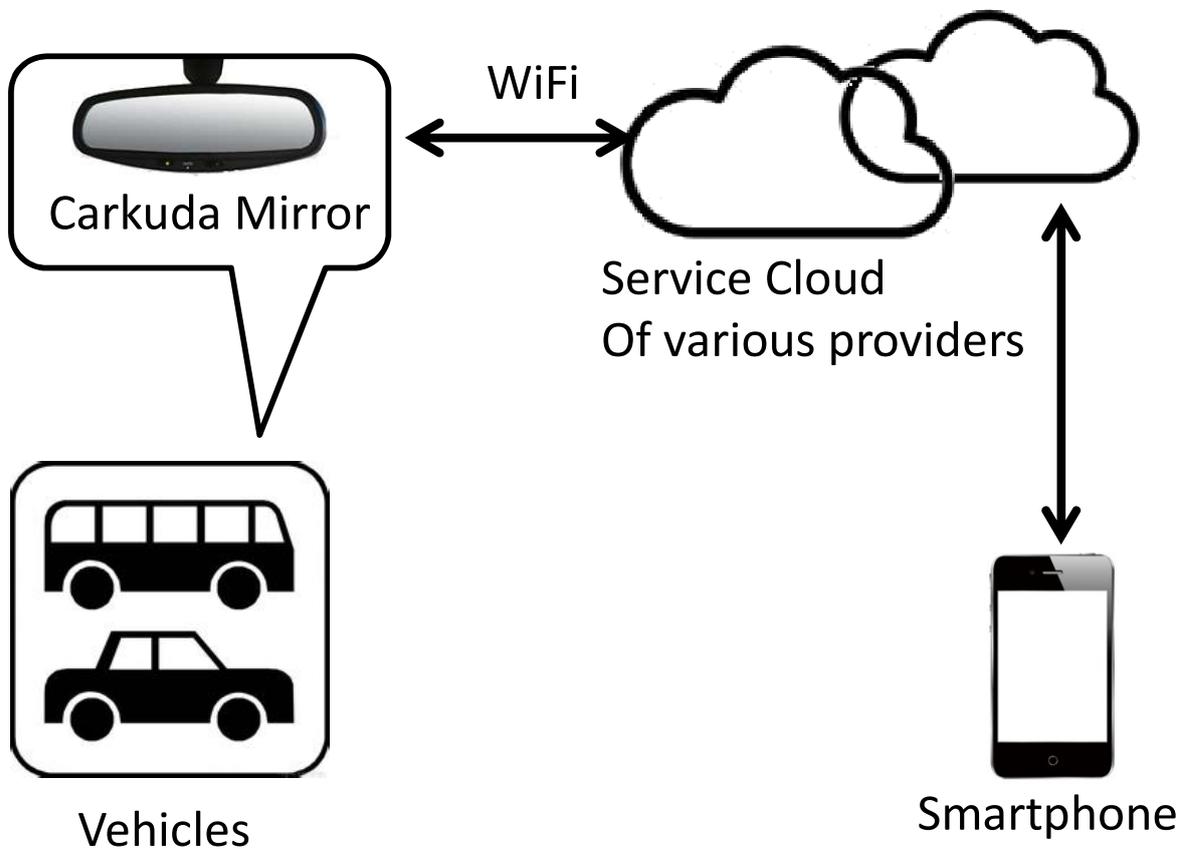
Contents

- Carkuda Concepts

- Quick Start

- Installing Carkuda Mirror

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Carkuda Concepts

WiFi

Carkuda Mirror

Service Cloud
Of various providers

Vehicles

Smartphone

- Carkuda Mirror is installed in vehicles
- Carkuda hardware connect to battery, ACC power line, reverse signal line, GPS antenna
- With data network, mirror talks to Services Cloud
- Data network is Wi-Fi network
- Services cloud can be public known like Google Map, or manufacturer provided cloud
- User can user Carkuda Mirror directly by touch screen
- Smartphone connect to Mirror by data network
- Smartphone access mirror data from Service Cloud

Quick Start

Install Carkuda Mirror

- Mount, Connect, Insert SIM Card
- See Page: 5 - 10

Use In-Mirror Features

- DVR, Navigate, Play
- See Page: 12 - 25

Carkuda Smartphone App

- Bind, Check, Monitor
- See Page: 27 - 36

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- Carkuda Concepts
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- Installing Carkuda Mirror
    - Mounting
    - Cables
    - GPS Antenna
    - SIM Card & SD Card
- Using Carkuda Mirror
- Using Carkuda Smartphone App
- Technical Specifications
- FAQs

Installing Carkuda Mirror -Mounting

●Universal Plastic Bracket

Please identify if your car mirror has a round connector with mounting bracket.

If yes, then please turn the switch and take the original mirror off from the bracket.

Keep the mounting bracket on the windshield as it is. We will use this stand as the base for universal plastic mounting bracket.

Within this bracket kit, we have 5 screws. There are 4 for Installation and 1 for backup purpose in case your lost them.

Installing Carkuda Mirror -Mounting

Please select the proper size head circle according to your Existing mounting bracket. Place the plastic head and drive the screws into the mirror.
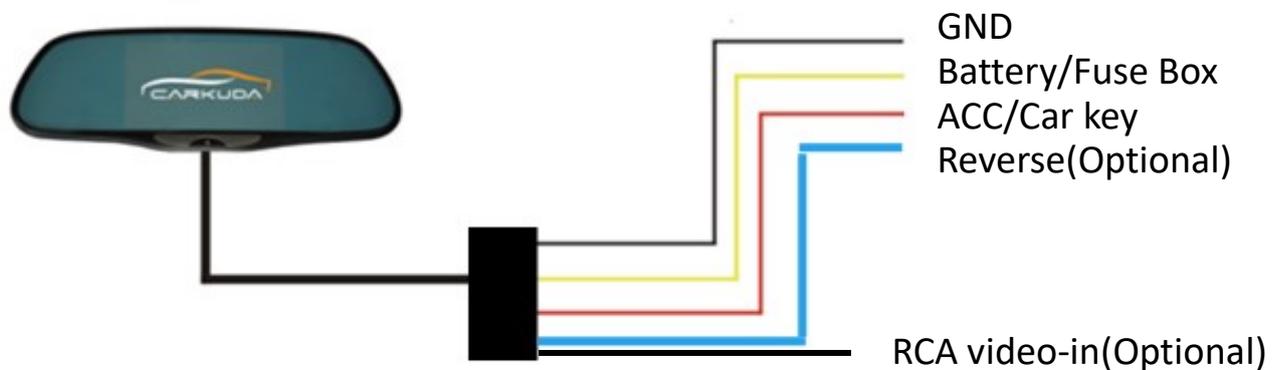

There many size of plastic circles for tightening purpose
Please try and select the proper one for your mounting size

You can test the size of circle caps by putting onto the bracket.
At last, please put the circle cap, screw head and twist them tightly.

Installing Carkuda Mirror -Cables

GND
Battery/Fuse Box
ACC/Car key
Reverse(Optional)

RCA video-in(Optional)

Carkuda requires battery power after vehicle is turned off. This is because users need to access Carkuda real time data remotely via Smartphone. Carkuda also need to connect ACC signal line to offer security monitoring features. With signal line connected, Carkuda can detect every ACC on/off event.

There are a bundle of cables with different colors. Please connect:
•The black one with GND connector
•The yellow one with battery, from fuse box or battery
•The red one with ACC cable, which indicate the car is on/off
•The blue one is use to detect reverse signal for reverse packing video(Optional feature)
•The Green line to FM antenna(Optional)
•The RCA video-in, for reverse parking video

Warnings
•DO NOT mix the +/- of battery connectors.
•DO NOT connect red line with battery, otherwise Carkuda can not detect ACC on/off
•DO NOT connect yellow line on ACC power, otherwise Carkuda will shutdown itself, remote security feature will not activate.   8
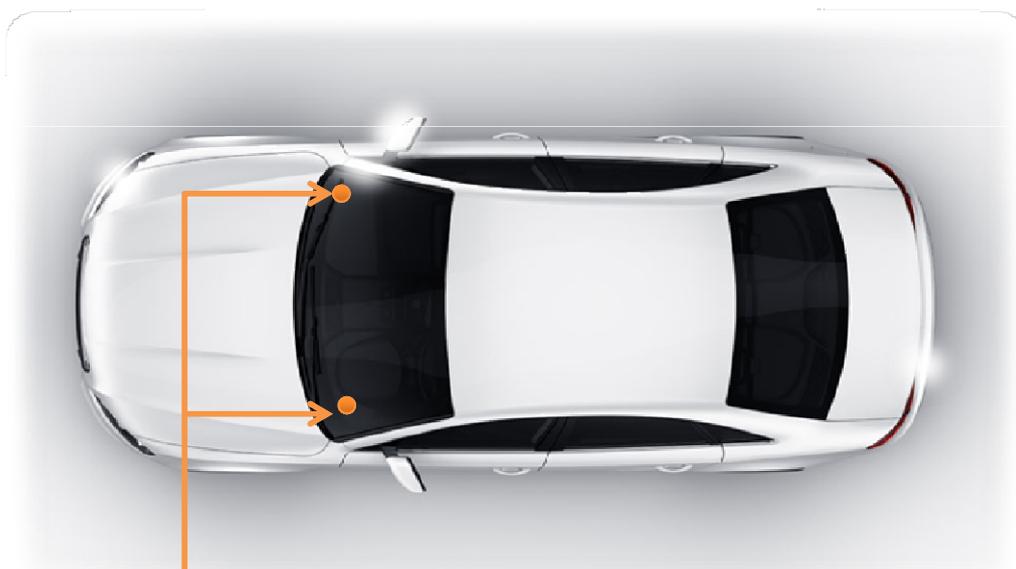
Installing Carkuda Mirror -GPS Antenna

We have also prepared GPS antenna. This antenna helps to receive GPS signal in a very fast and stable manner.

The recommended position to install GPS antenna head is under the windshield, and on top of dashboard. It can be left or right.

Once the antenna is installed properly, we can screw the GPS signal line connectors together.

Recommended GPS Head Position
Better visibility to satellites

Contents

Using Carkuda Mirror -DVR

We can tap into the DVR button. It displays & records the real time video. To check the history video, we shall go to File Manager function. We can play the files on the mirror.

HD/FHD switching

Snapshot

Mute/Un-mute sound recording

Start/Stop recording
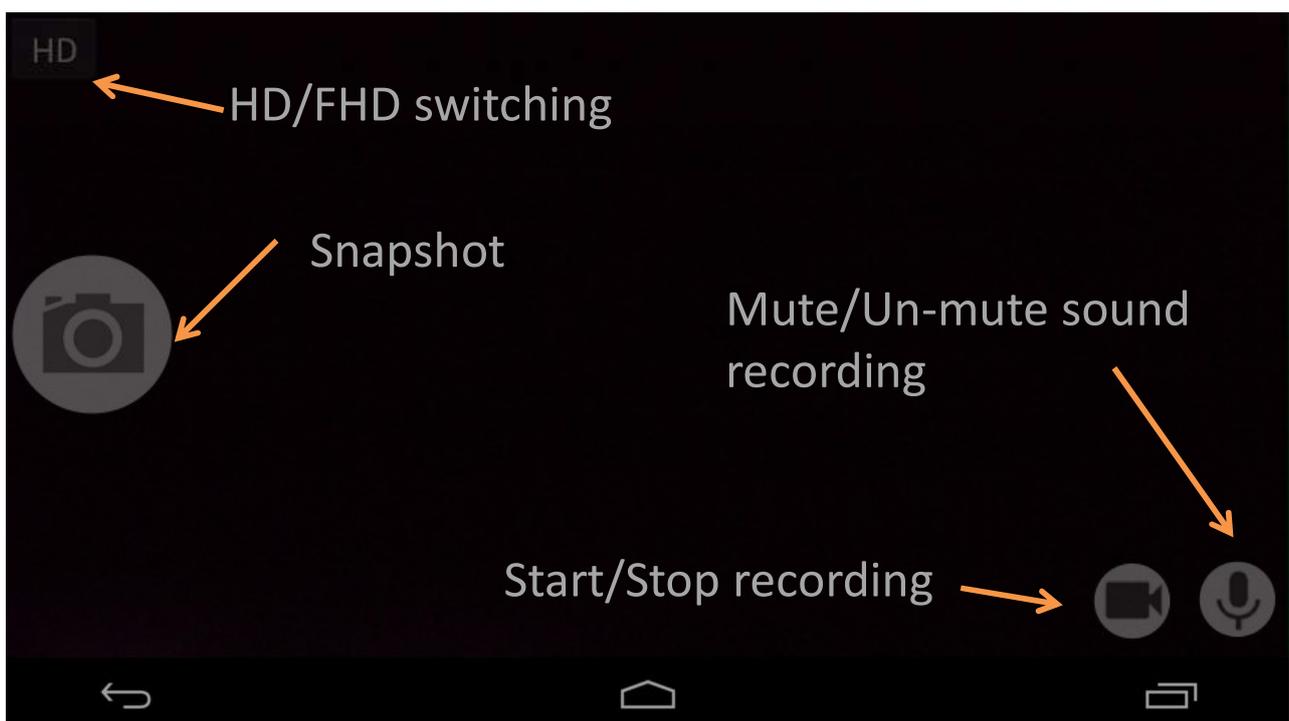
Using Carkuda Mirror -Navigations

To start navigation is relatively easy. Carkuda supports various navigation systems like Google map, Yandex, Waze, Yahoo Map and many more. The user experience is same as we have on Smartphone.

Note
•Navigation systems require data connections to work properly.
•Carkuda system can accommodate different kind of navigations. Customization is offered from Carkuda Mirror team.
•Please contact manufacturer for details.

Using Carkuda Mirror -Snapshots

Carkuda has soft button for snapshots. When driving, the driver can instantly click on snapshot, Carkuda will capture the image and upload to cloud server, which can synchronize to your Smartphone app automatically.

Carkuda Service Cloud

Smartphone
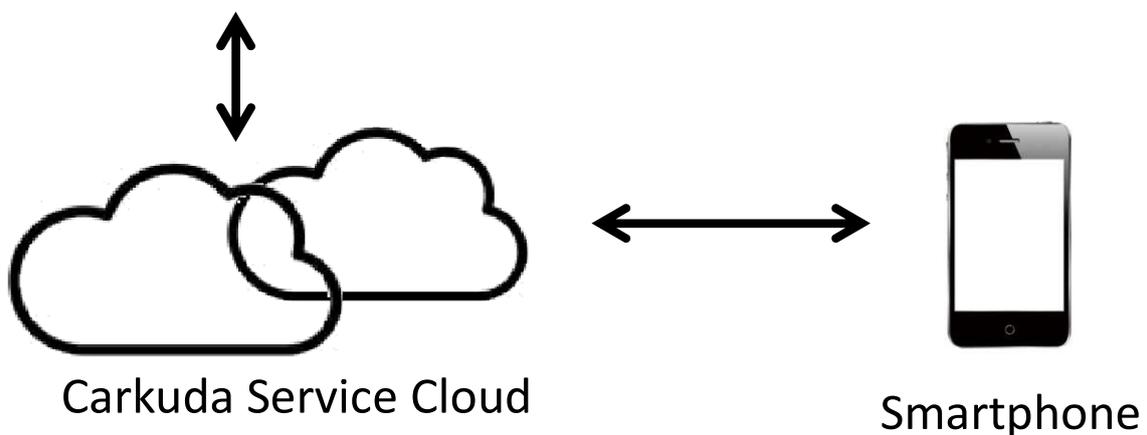
Note

•The mirror need data connections to synchronize photos.

•Carkuda currently offers cloud storage for all end users.

Using Carkuda Mirror
-SOS Email

Once SOS request is pressed, the emergent contact person will receive email alerts with real time address and images attached.
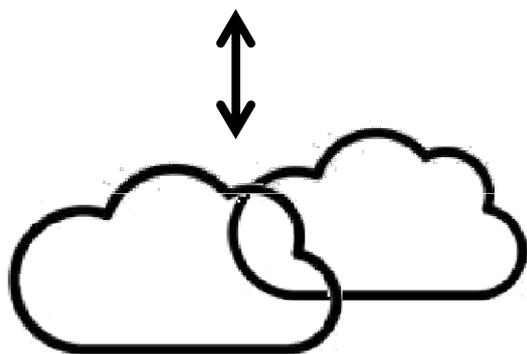
Carkuda Service Cloud   PC or Smartphone

Note

•Carkuda E-mail SOS alert is offered to users globally.

•Carkuda does not grantee the delivery of E-mail due to various network situation, different mail servers etc.

•Carkuda takes no commitment or responsibility.

•SOS Email settings: on App, [Personal Center] -> [SOS]

Using Carkuda Mirror
-Google Play

Carkuda offers Google play store feature. Users can install their favorite apps into the mirror.

Once new app is installed, user can found new icons in the new pages.

For performance purpose, Carkuda recommend user to install limited numbers of Applications. (Less then five apps)

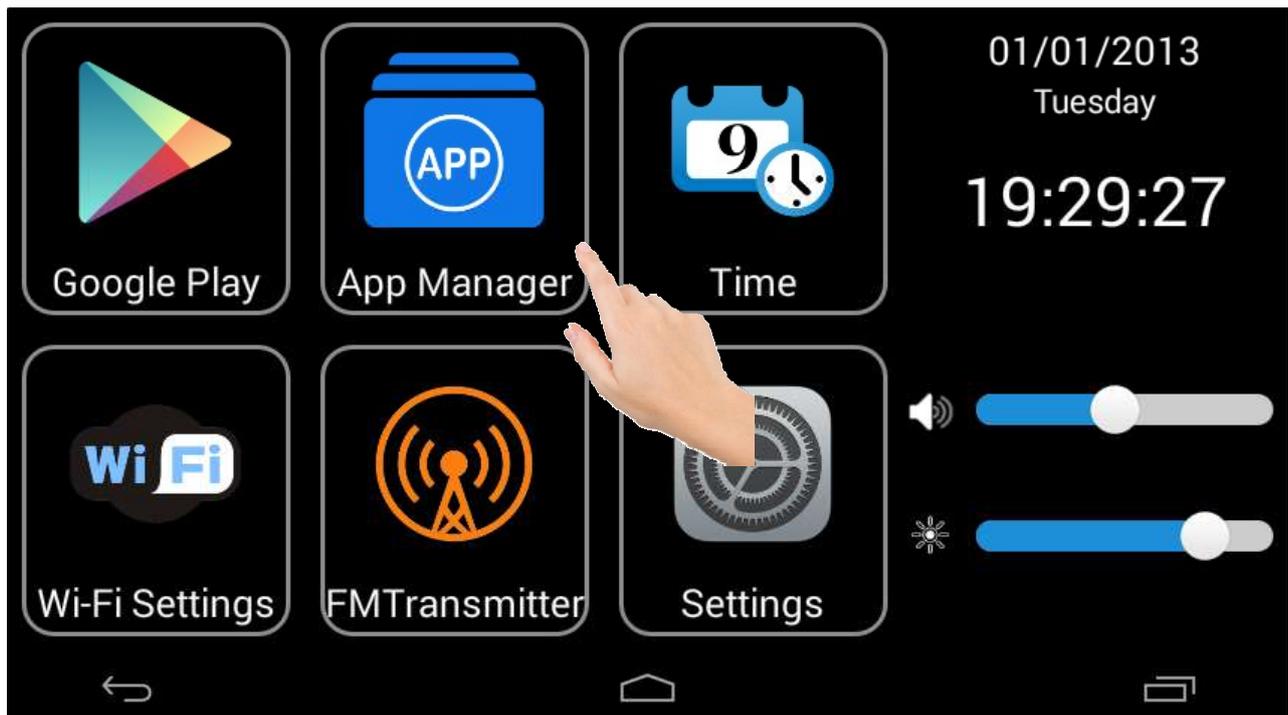If the performance is degraded, please use App Manager to delete Apps accordingly.

Google Play need data connections to download Apps.

Google Play requires proper Google user account.
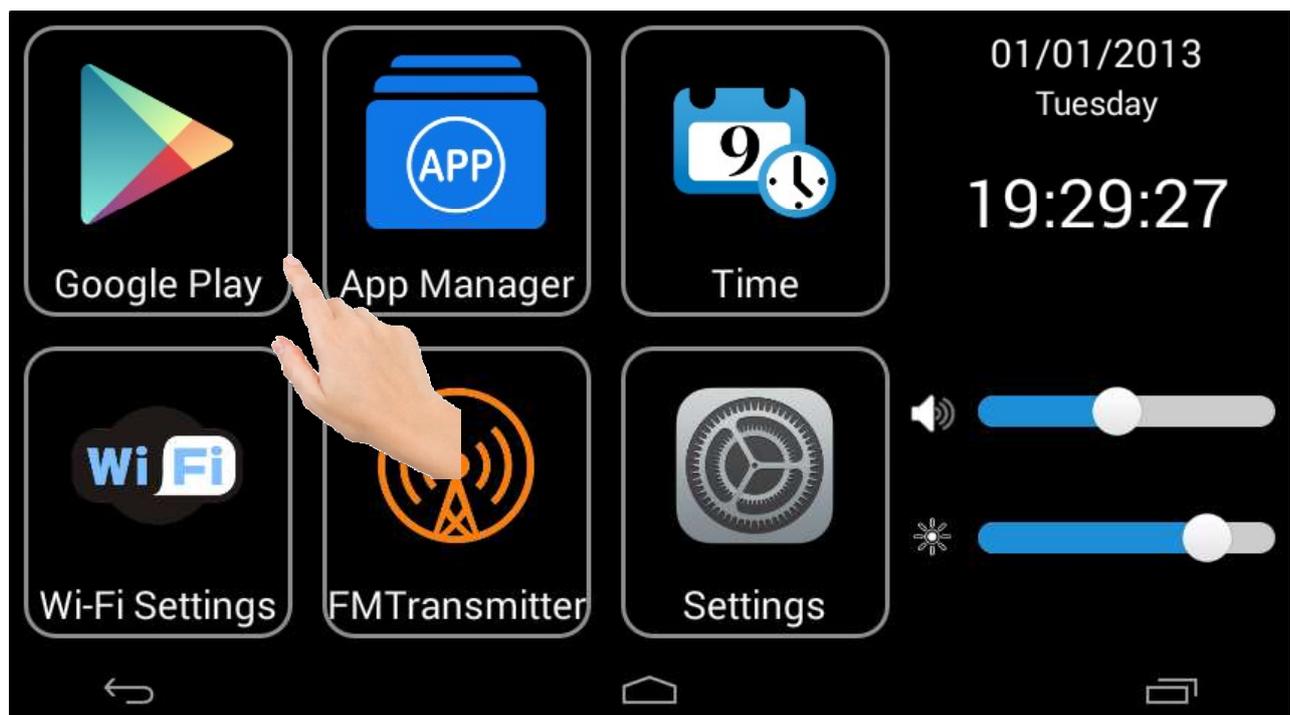
Using Carkuda Mirror
-App Manager

In case we need to remove app, App Manager is designed for this purpose. By click on install App, users can select to remove the app.
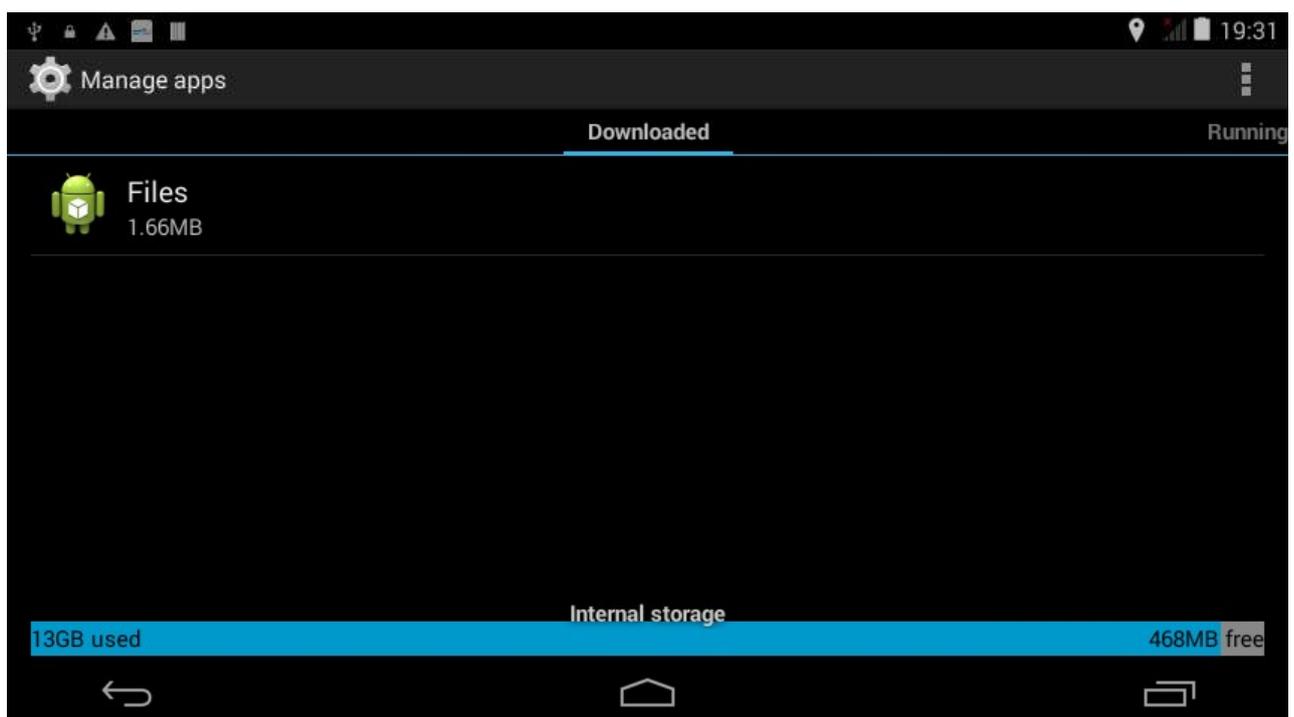
Using Carkuda Mirror
-File Manager

By tapping into File Manager function, users can play DVR historical videos. Delete historical video files. Clean up SD card or internal memory space.
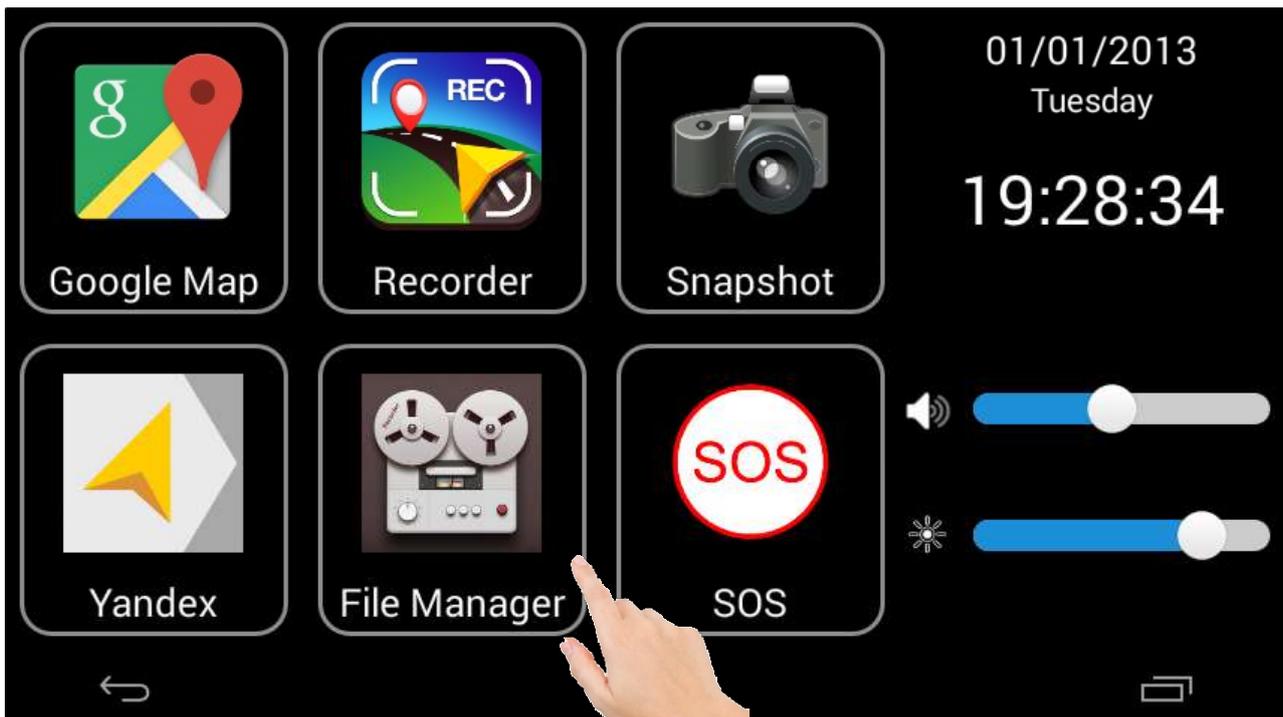
Using Carkuda Mirror
-File Manager

Click on the file names can start play history videos.
Press return arrow on left-bottom part can quit playing.
User can tick, select and delete the files as needed.
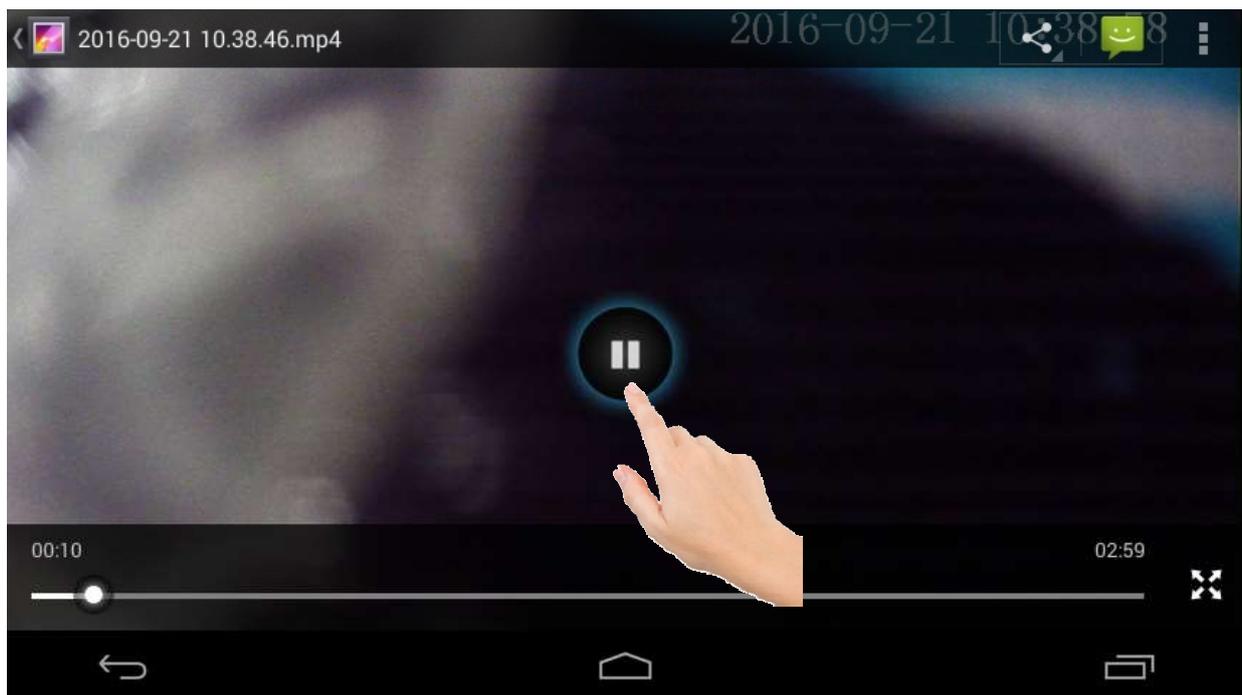
Using Carkuda Mirror
-Date & Time

Like most of Android devices, users can set the time and date from system settings.

Note

●We also recommend users to stay on the default settings. But if no SIM card installed, you can turn to GPS timing for automatic date & time adjustments.
●During the system running period, Carkuda will synchronize the time automatically with network server or GPS

Using Carkuda Mirror -Wi-Fi Network

Carkuda supports Wi-Fi connection. If there are Wi-Fi networks nearby, we can click on the Wi-Fi settings, scan and log onto Wi-Fi networks. Typically, Wi-Fi network comes from parking place, Smartphone hotspot or dedicated Wi-Fi routers.
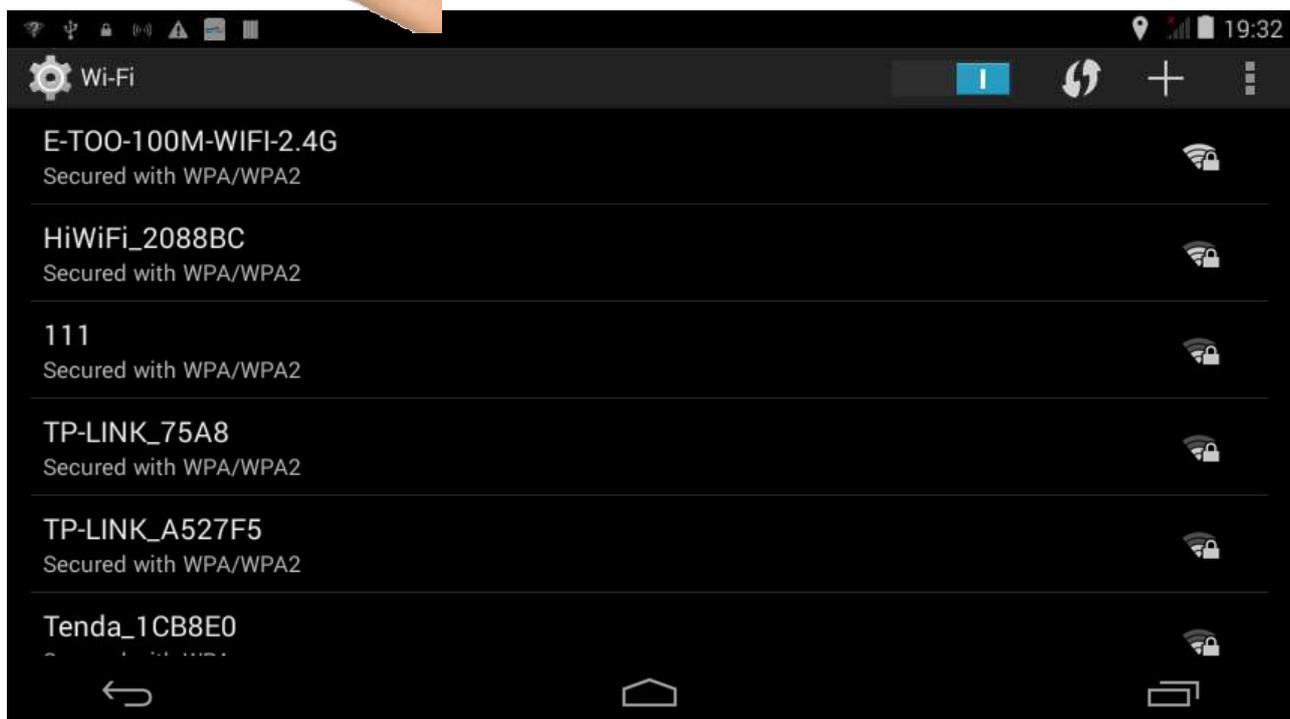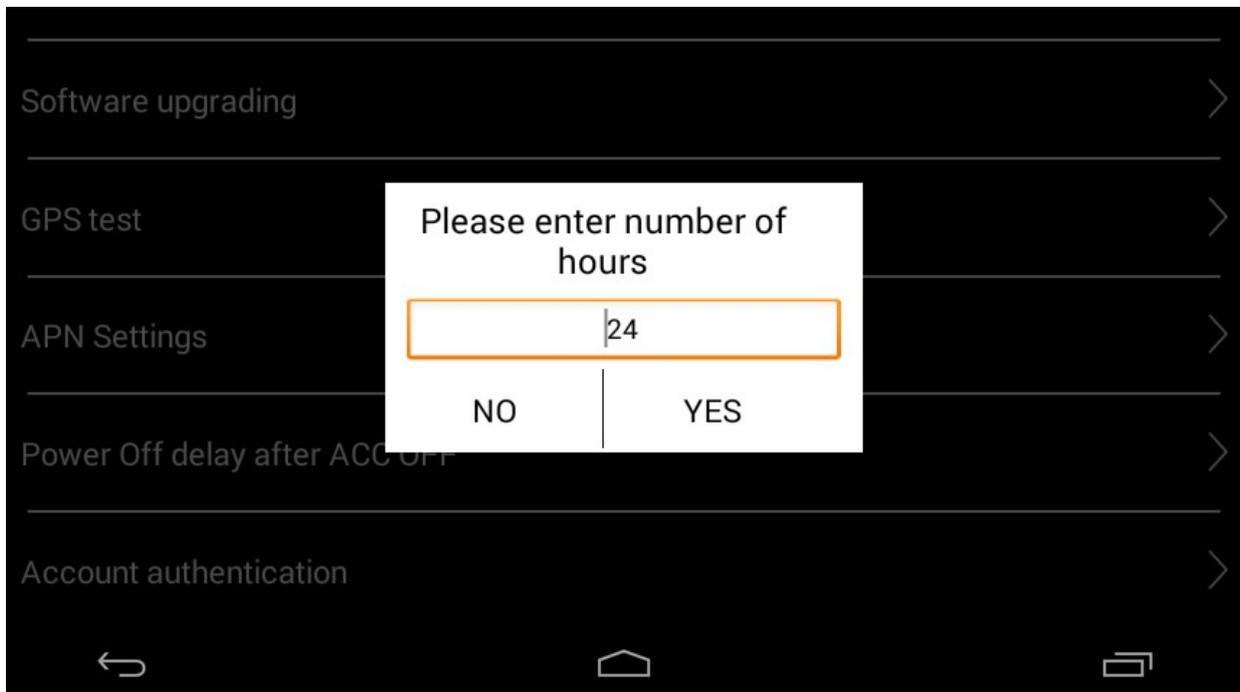
Using Carkuda Mirror
-FM Transmitter

Once your car radio is tuned to the same frequency, then mirror sound will be broadcasted to your car. Remember to turn off the transmitter when you want to hear from the mirror again.

Turn on/off FM broadcast
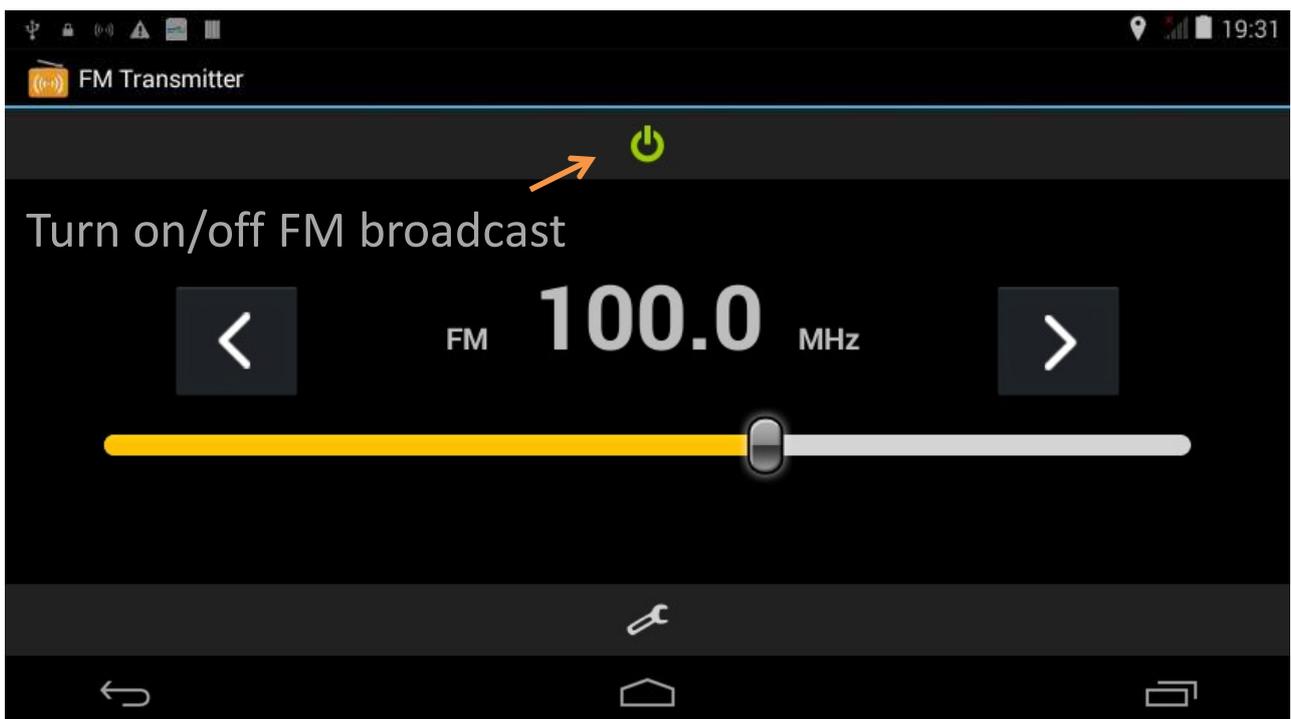
Using Carkuda Mirror
-Shutdown Delay

Menu: [Settings]->[Power Off delay after ACC OFF]

Since we offer remote security feature, Carkuda will be in a standby mode after vehicle is off. It will keep listening to the data network and response to remote client's request.

And by default, after 24 hours, Carkuda will shutdown the mirror to save the car's battery power.

To change the shutdown delay, users can navigate to the settings' last menu, type in the number of hours and click YES.
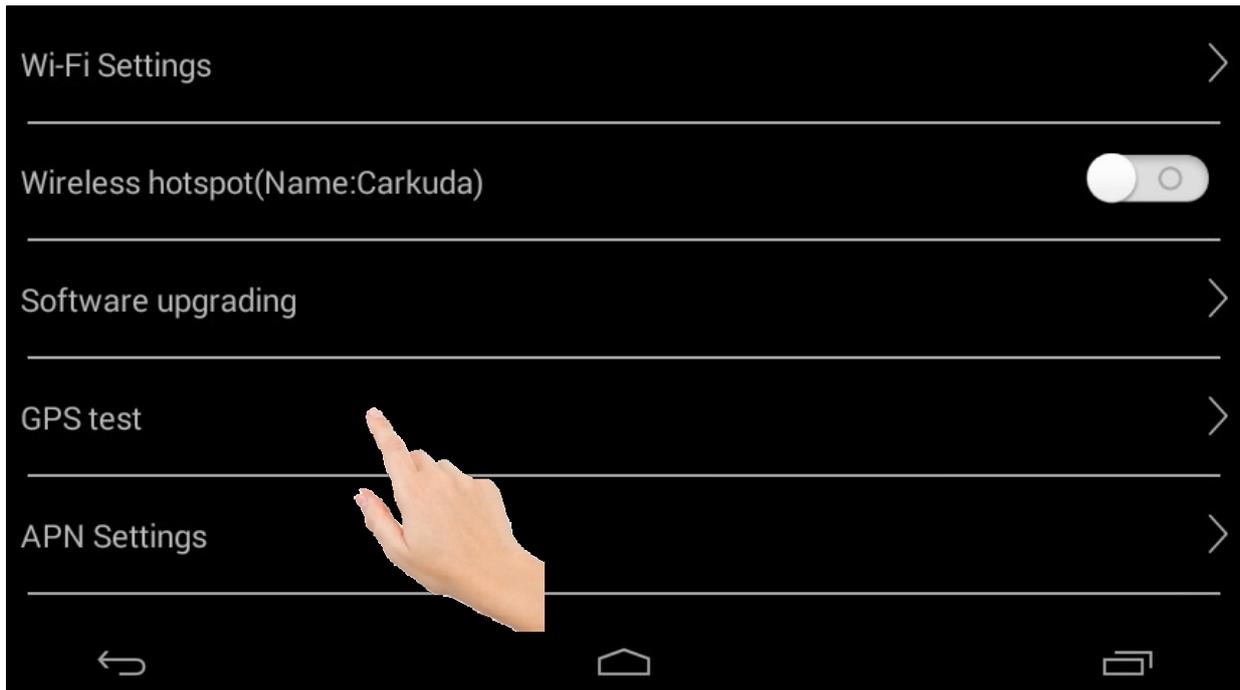
Using Carkuda Mirror
-Software Upgrade

Carkuda offers online and offline SD update.
Online update require data connection.
Offline update files will be distributed by re-sellers.

Wi-Fi Settings

Wireless hotspot(Name:Carkuda)

Software upgrading

GPS test

APN Settings

Current version:1.4

Online Updater

SD Card Updater
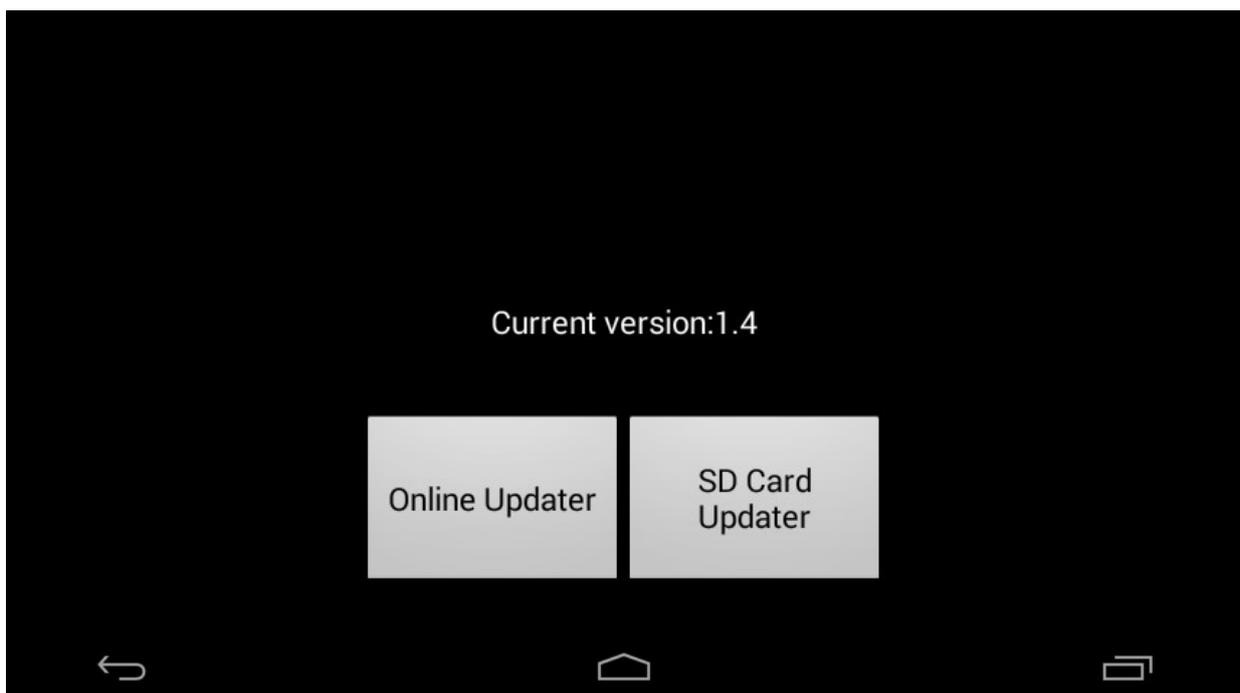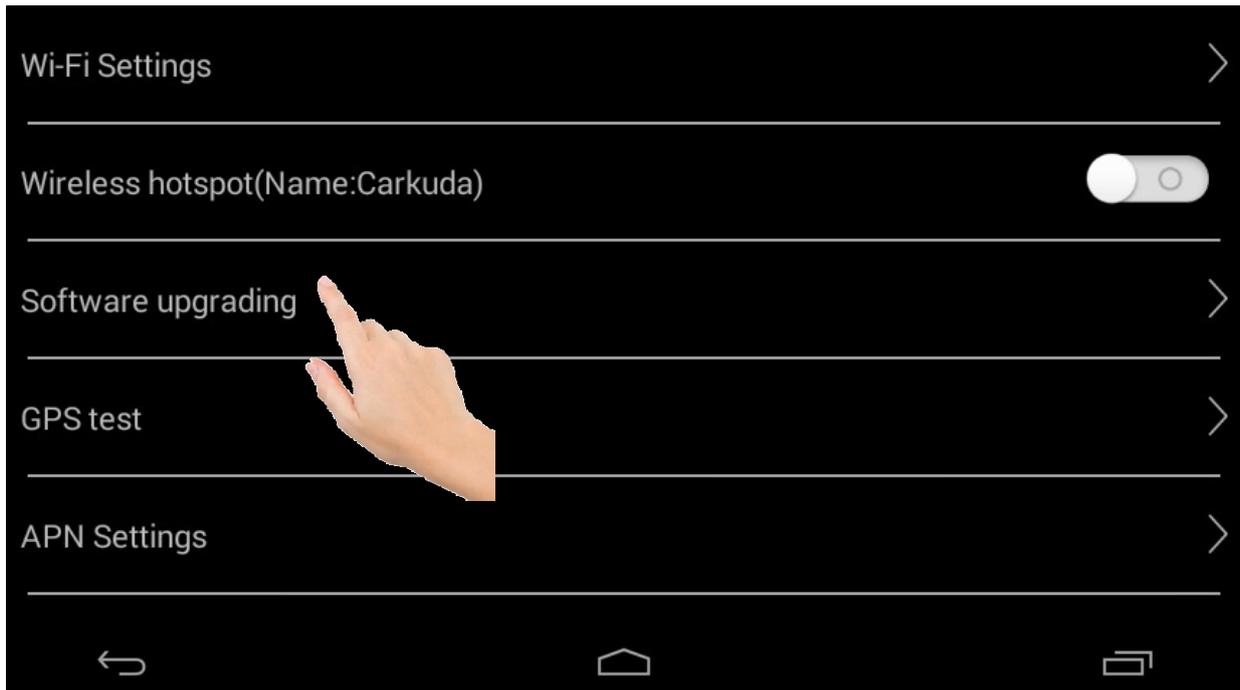
Using Carkuda Mirror
-GPS test

GPS test offers user a tool to check the GPS signal status.
It display the number of satellite received and signal strengths.
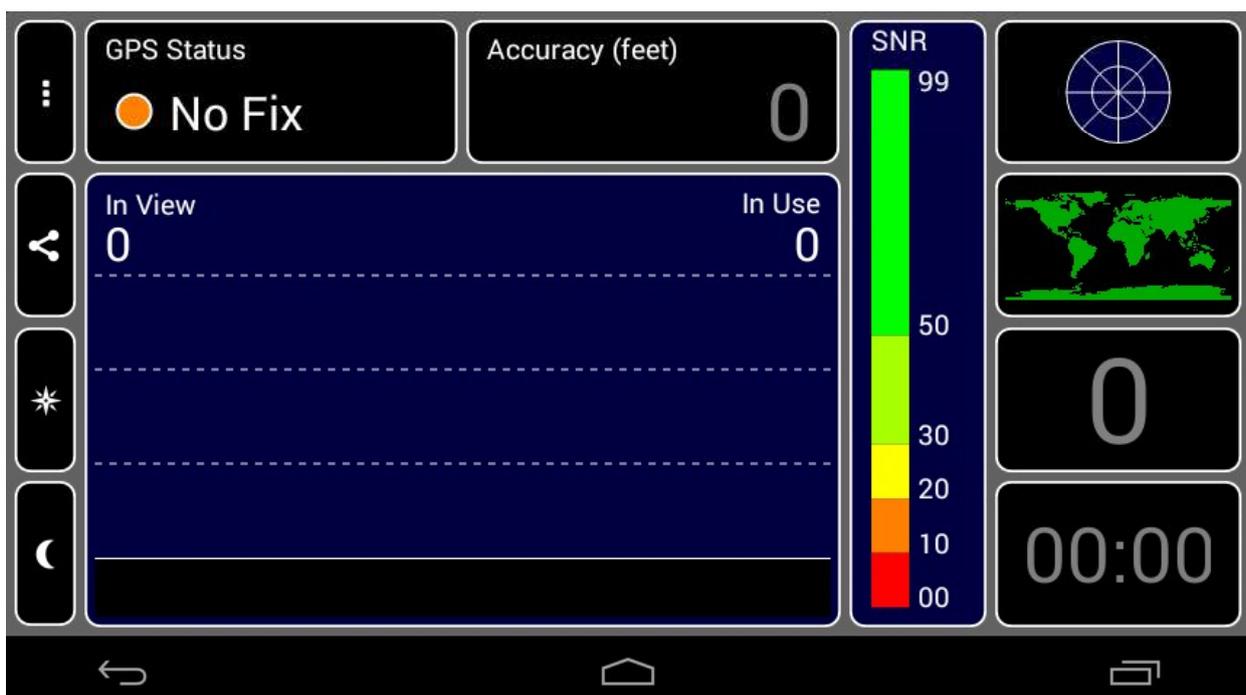
Using Carkuda Mirror
-How to Reboot

In any cases that if user experiences:
- Screen freeze
- Touch pad not responding
- Install new SIM card
- Install new SD card
- … etc.

Users can long press the middle button on the front face for more then ten seconds. (> 10 s). Then wait for a little while, the machine shall flash the screen and re-start.

If further issues, please contact your local distributors/retailers.

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Using Carkuda Smartphone App- Installing App

Please search for "carkuda" in AppStore or Google Play Store. Please install [**Carkuda Global**] App.
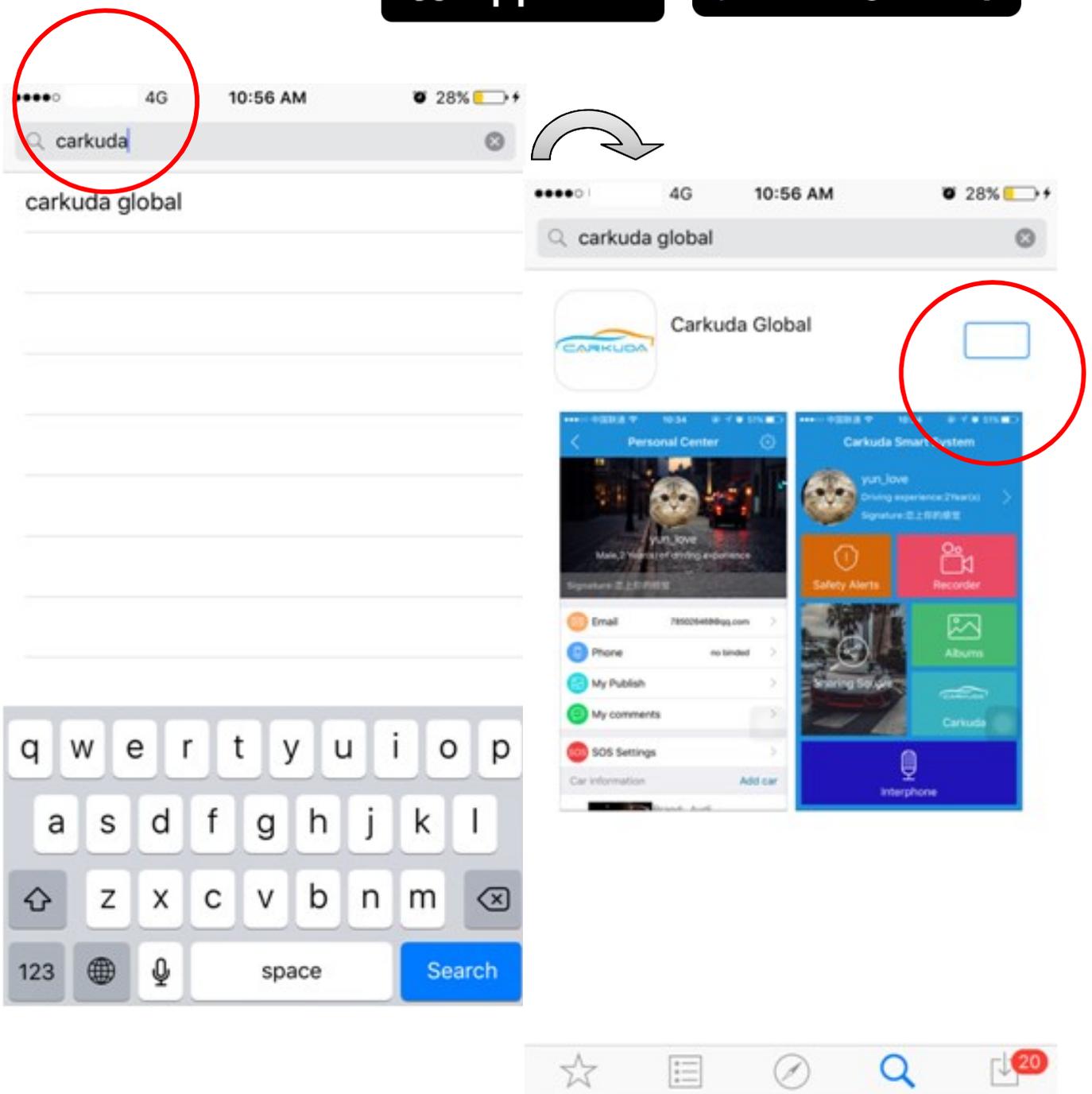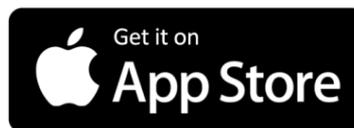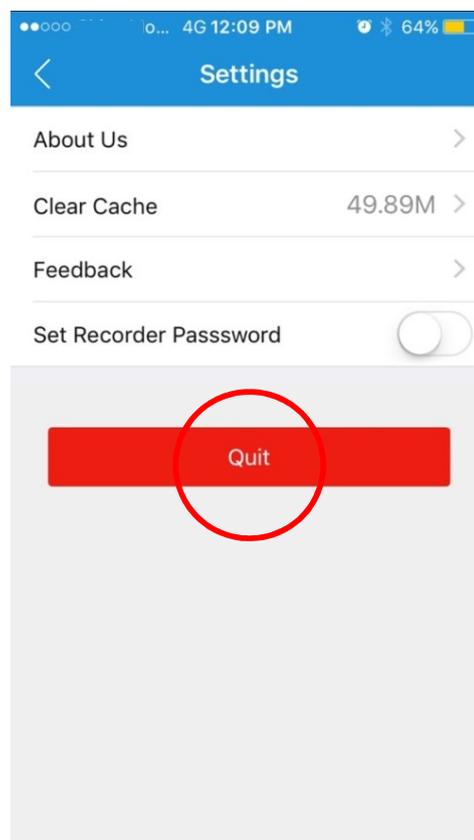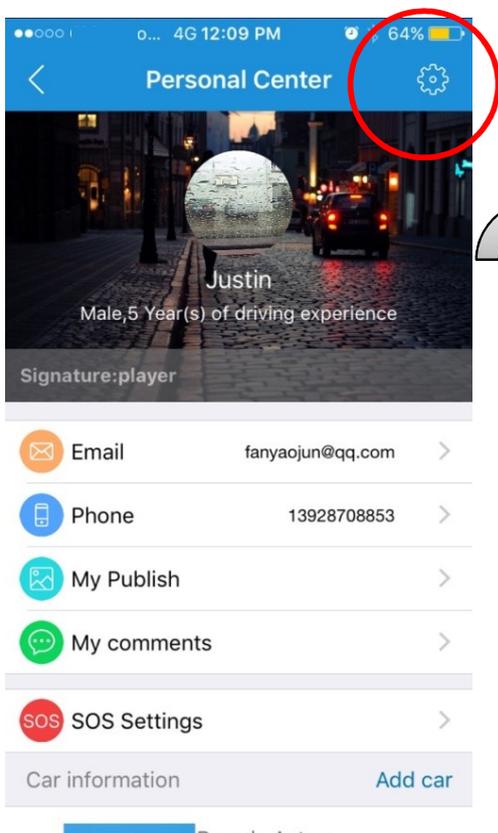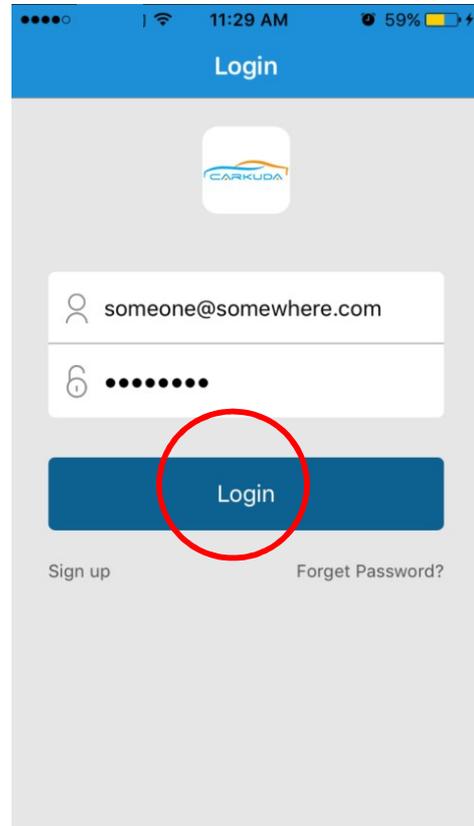
Using Carkuda Smartphone App- Create User Account

Users can register their accounts by providing a valid E-mail address, then click get verification code button and setup the passwords. Sometimes, the verification code email maybe found in your Junk Email box, depending on different email services.
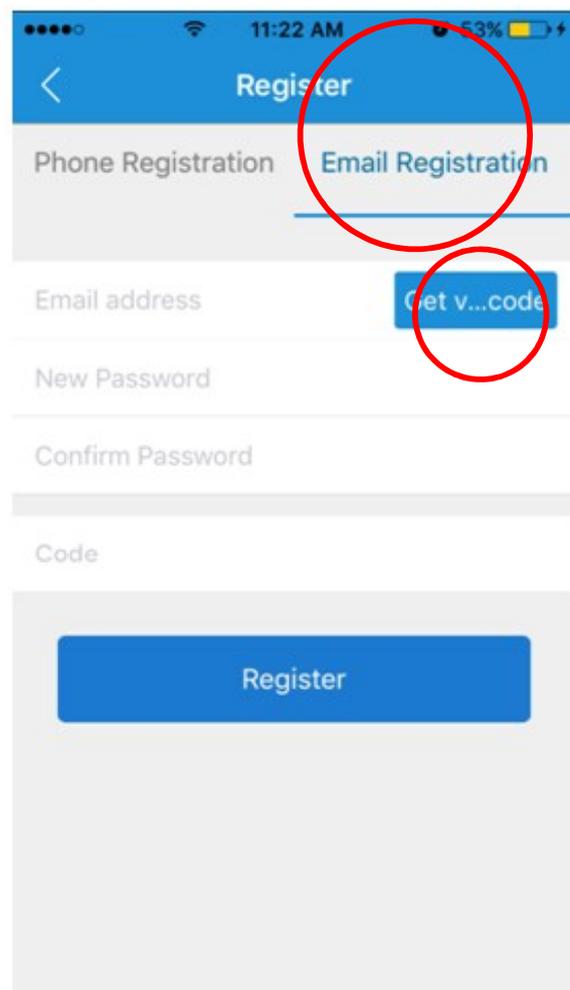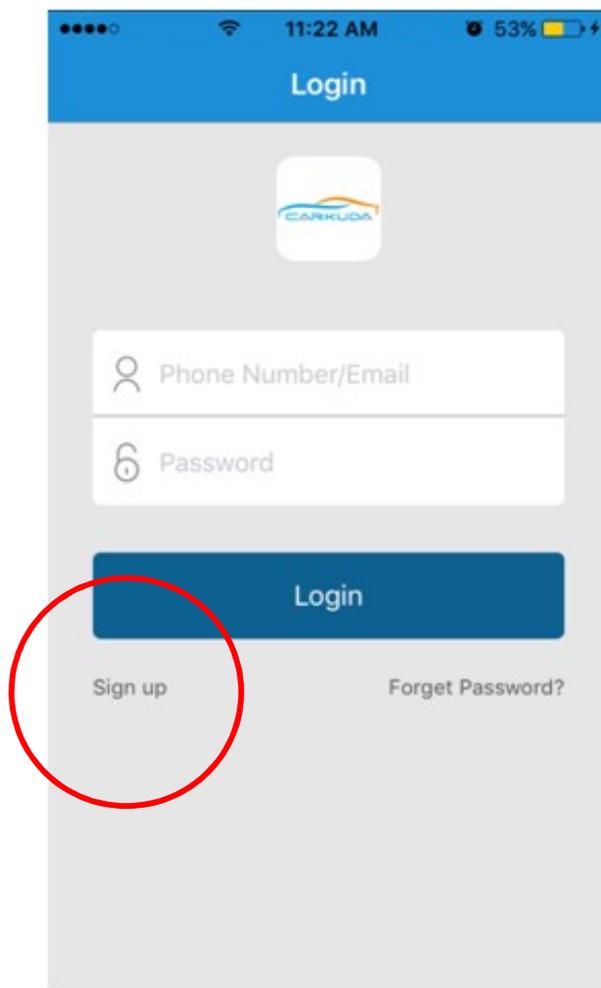
Using Carkuda Smartphone App- Login/Logout

1. To login the App, please provide the registered user email and password. Then click on Login button

2. To logout the current user, please click into [Personal Center], then click on the icon located right-top of the screen. In [Settings] page, click [Quit] to logout.
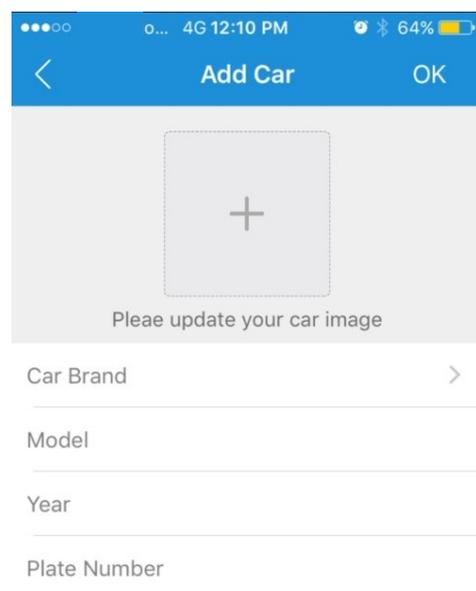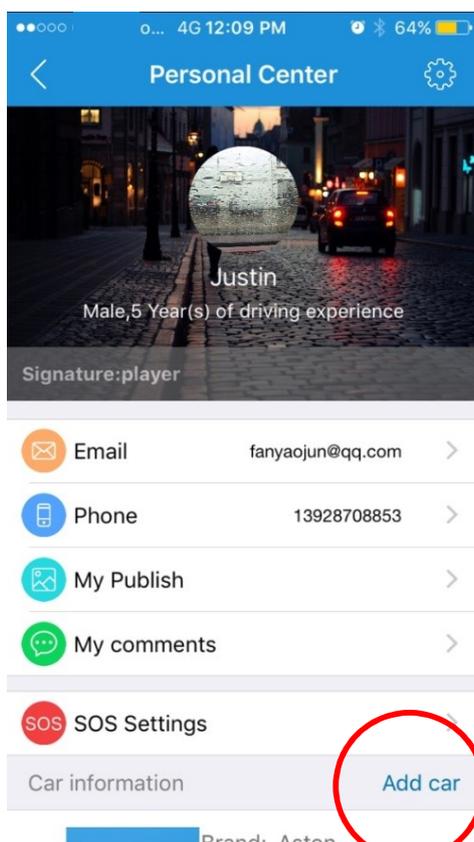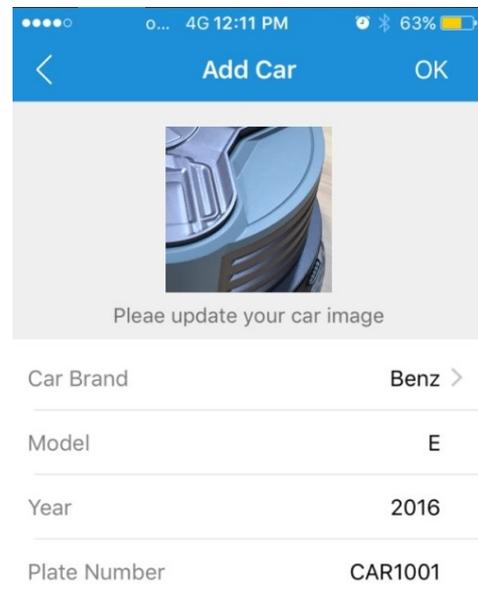
Using Carkuda Smartphone App- Create Vehicle Info

After login into the app, we need to tell the system our vehicle and mirror information. So to link all these together.

In [Personal Center], you can create vehicle info by clicking [Add car]. In the new page, please provide the car image, brand, model, year and plat number.

Then click [OK].

Using Carkuda Smartphone App- Binding Mirror with Vehicle

We need to bind the mirror info onto the same vehicle. By tapping into the car info, we see a green button. Click on it and provide the mirror SN and PIN number.
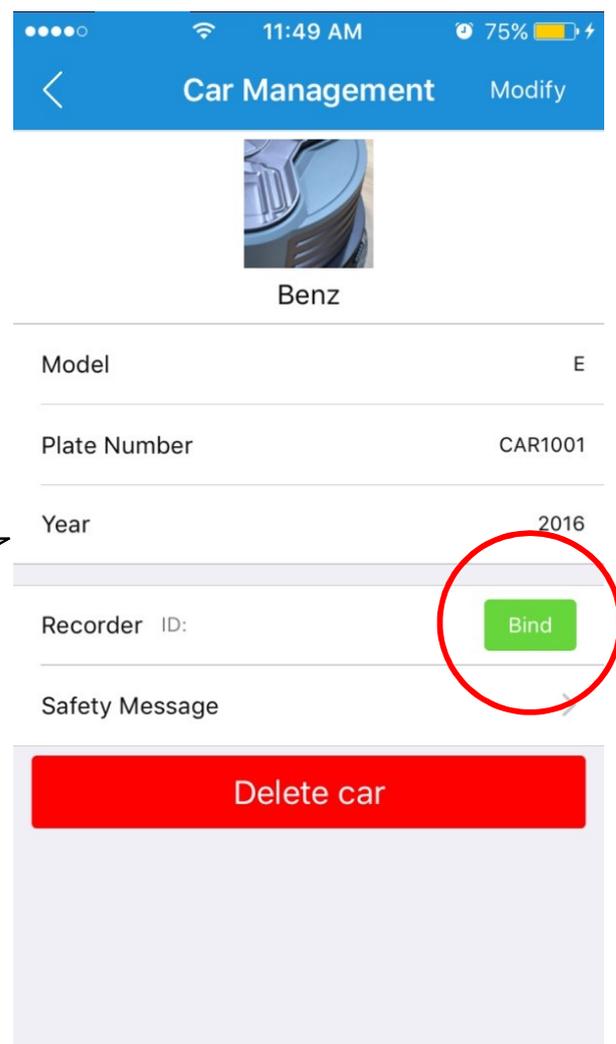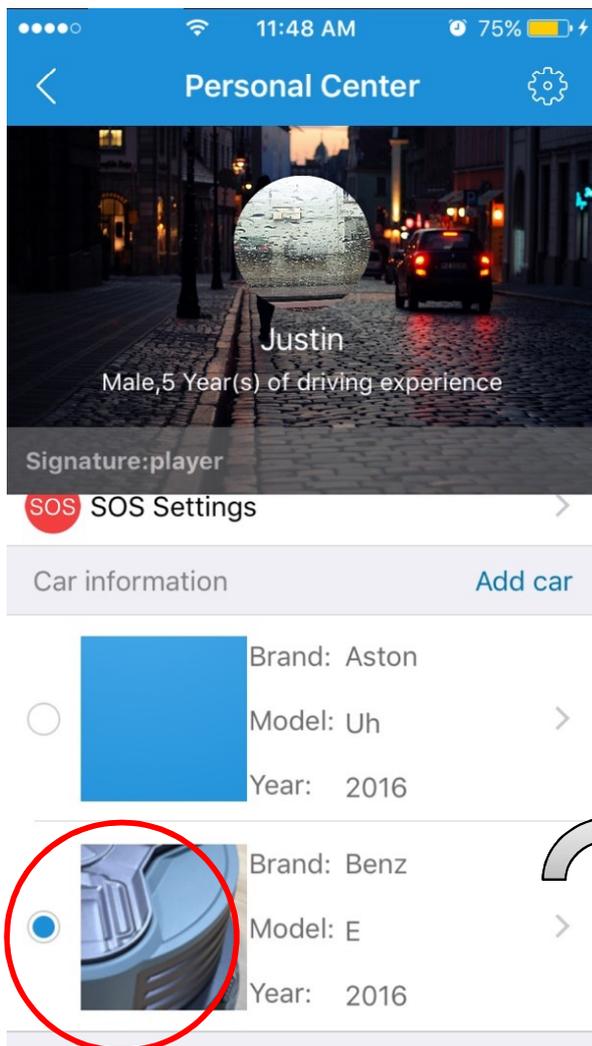
Using Carkuda Smartphone App-Binding Mirror with Vehicle

In the [Bind Device] page, the [Recorder account] equals [S/N] number, the Password equals [PIN]. The S/N and PIN can be found on the white label, which is stick on the top of mirror.
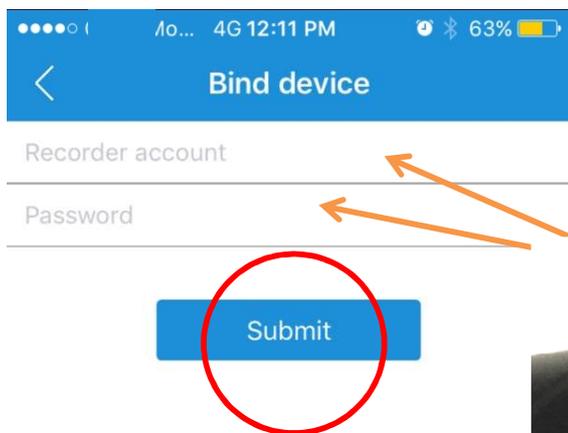

Note

•For security and privacy purpose, Carkuda system will allow only one account, mostly the owner, to bind on device.
•This exclusive right maximize the data security (ACC record, GPS track, live images etc.)
•Before other account can access the data, owner shall un-bind first to release this exclusive right.

Using Carkuda Smartphone App-Safety Alerts

The first block is safety message. It records your car's every engine start stop events, with time and locations information listed. If hard break is detected, then message will be sent to App too.

Note
The locations names depend on the GPS signal. If no signal, then the location will be recorded as [location not found].
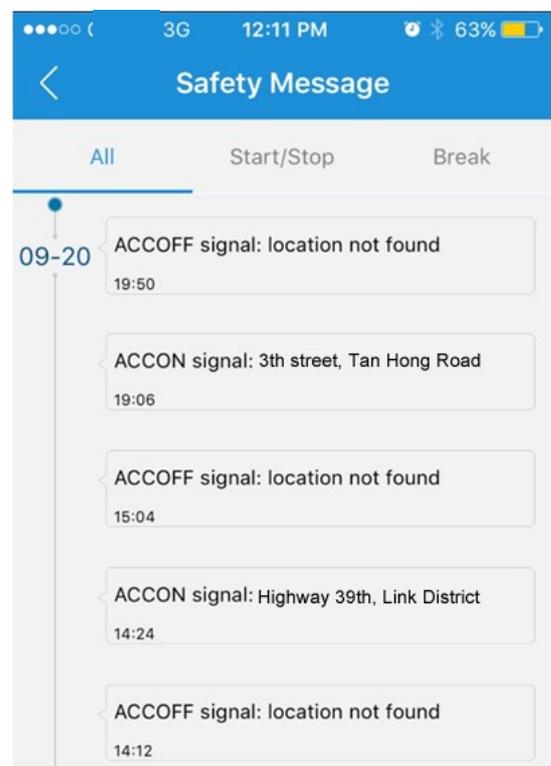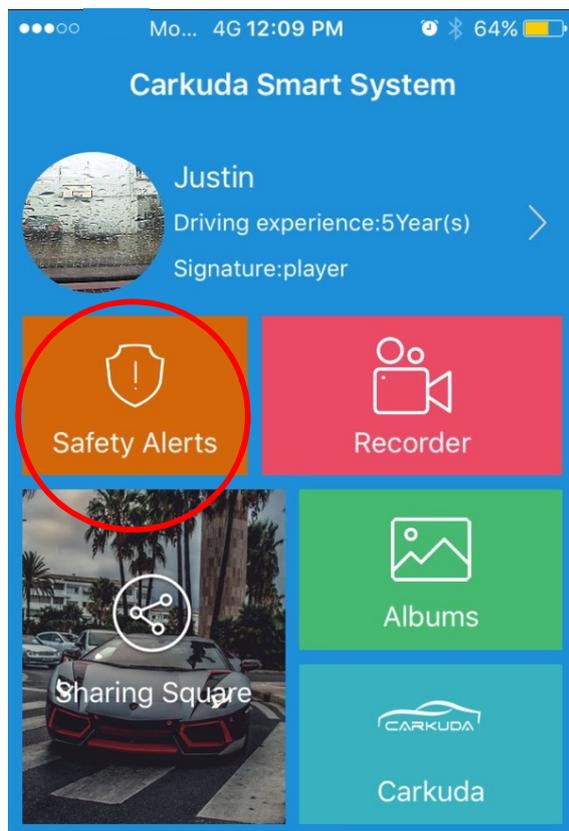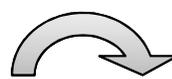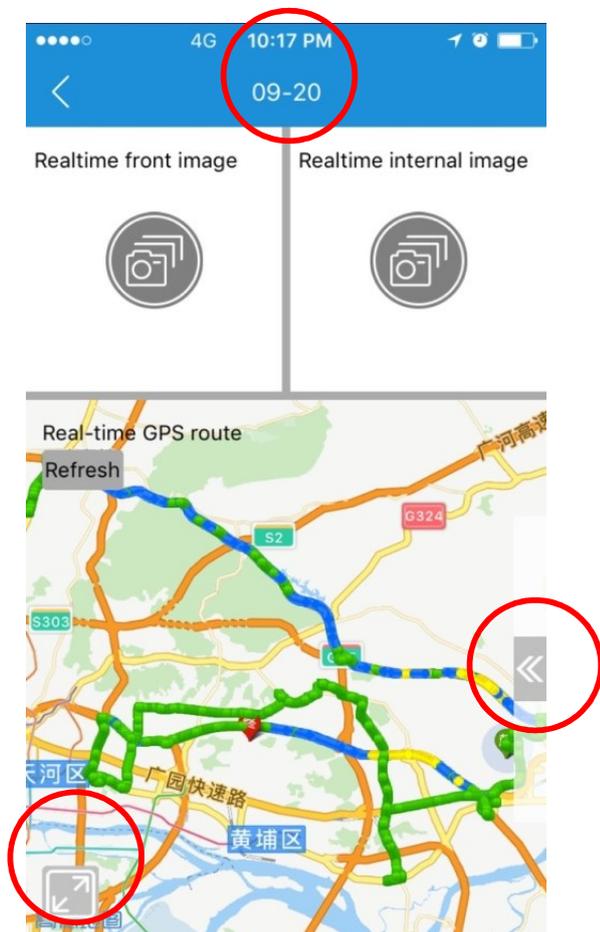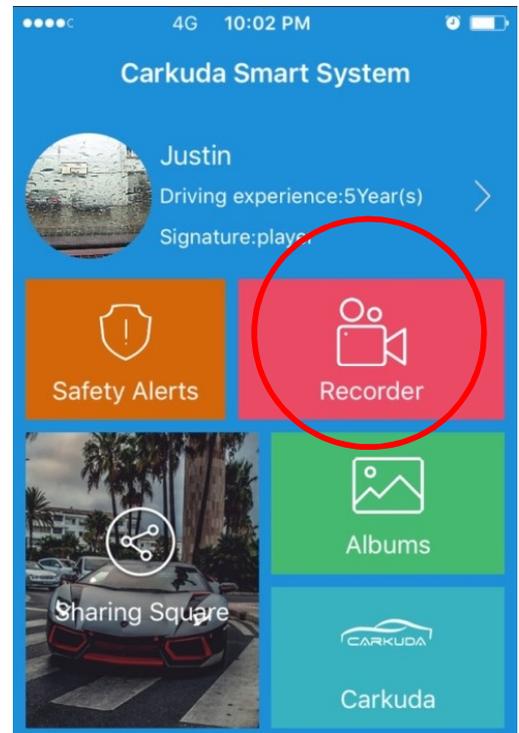
Using Carkuda Smartphone App- GPS Tracker

The second block is GPS tracker. Carkuda records all GPS locations and speeds.

Distinguished by different colors, we are able to check where we drive over the speed limits.

On the top of screen, we can change the date and see other historical data.

Using Carkuda Smartphone App-Live Image Feedback

By click on the image button, and wait a little while, then we can see the DVR's live image feedback.

Note

Carkuda VTG500X supports single camera currently. [Real-time front image] will work only.

Due to different network situation, users may experience different delay while waiting for image feedback.

Users can save the image by clicking [Save] on left-bottom. Or press [Refresh] to request for new images.
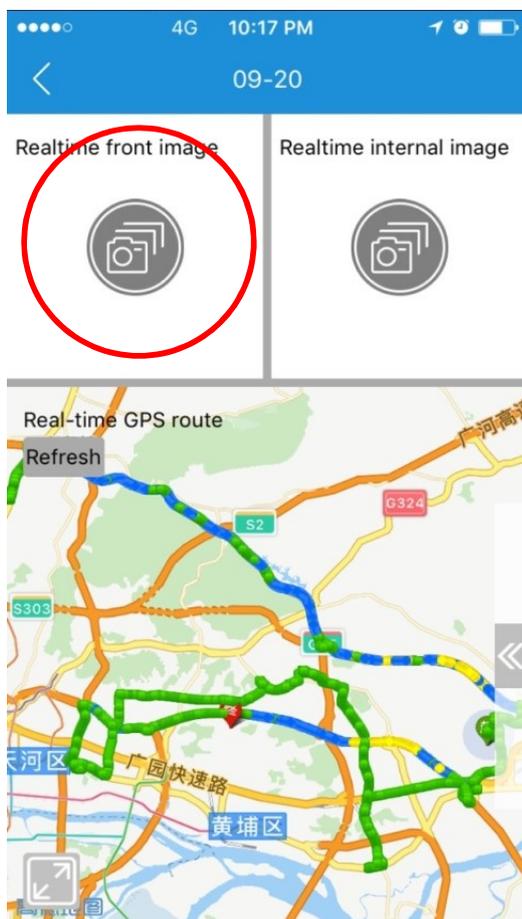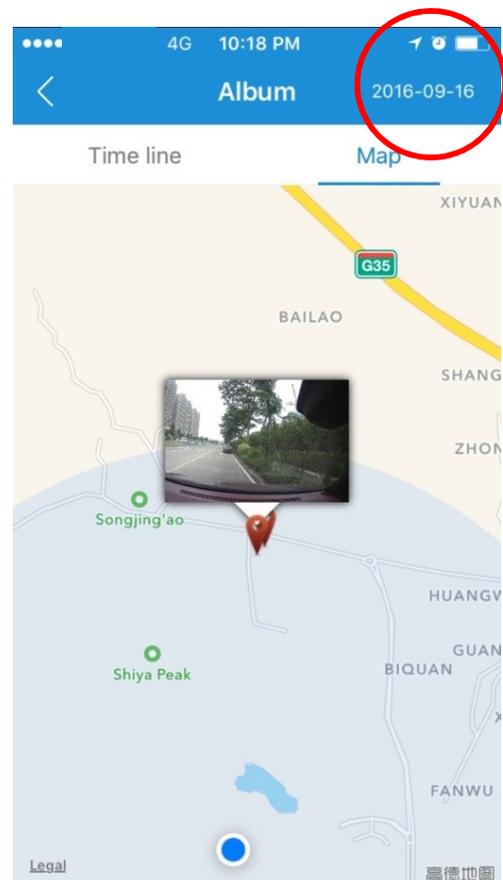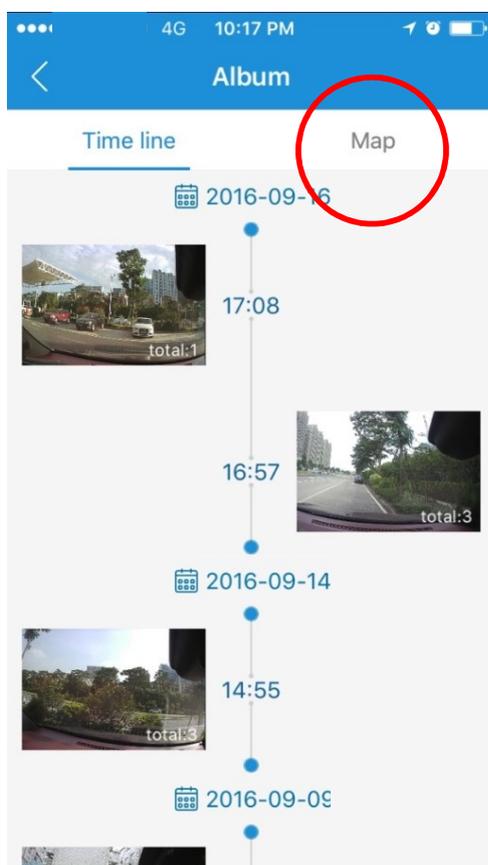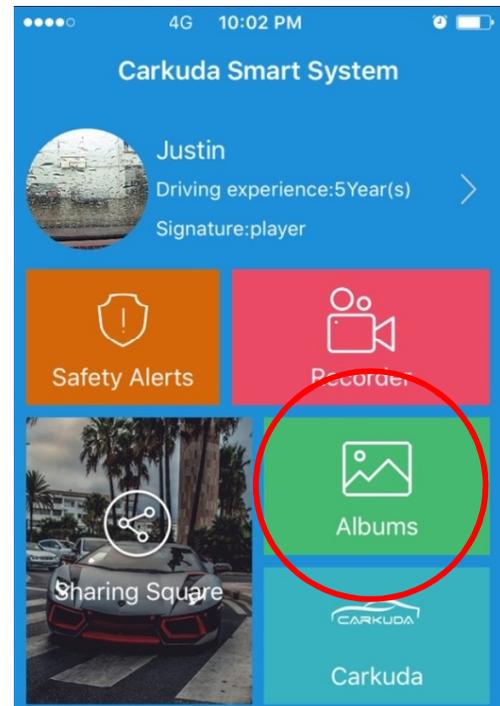
Using Carkuda Smartphone App- Photo Albums

The third block is Photo album, the photos are all snapshots which is taken from the mirror.

The photos are organized by time line and locations. By click on [Map] tab, user can switch to map view.

By tap on right-top of screen, we can search for different date.

Technical Specifications

Type	Item	Note
Wireless Connection	Wi-Fi	802.11b/g/n；@2.4GHz；WEP/WPA/WPA2, Access Point for Tethering、72.2Mbps or less
	GPS	Support GPS (Standalone and A-GPS)
Interfaces	Antennas	GPS、Wi-Fi/BT、FM
	Power	12V, has over voltage protection
	LCD	5 inches, IPS touch screen 480*854
	Camera	Front facing camera, at 720P or 1080P selectable by user
	MIC	Support
	ACC detection	Support
	Micro-SD Card	Support Micro-SD，Maximum 32GB
Sensors	G-sensor	Collision detect
	Radar	Not Support
Software	OS Base	Android 4.4
	FM transmitter	Support
	Media Playback	Support
	Rear Camera	Support for rear reverse video
	Smartphone	Support App Data Synchronization
Physicals	Size (mm)	268.5*90*46.48mm
	Languages	English, Chinese, Russian, Japanese
	System Memory	1GB DDR3+8GB/16GB eMMC
	Chipsets	MTK 8312CW
	Working Temperatures	-20 ~70 ℃
	Humidity	95%RH（at 45 ℃）

Packing List

Name	Quantity	Note
Carkuda VTG500X Mirror	1	
Main cable	1	
Mounting bracket	1	Black color
GPS antenna	1	
User Manual	1	

FAQs

Questions	Answers
Is the Smartphone app charged?	Carkuda Smartphone app is available for users for free
Is the service cloud need service fee?	Currently it is free-of-charge, later if Carkuda offers premium services. Or Carkuda partner offers extra services, it maybe reasonable fee. And it will not affect existing services.
How can I make sure Carkuda does not run out the car battery	Users can adjust the Power off delay time from [Settings] page. To shorten the delay like from 24 down to 1 hour.
Why sometimes I can not get the live image from App?	It depends on the data connection status If the signal of network is bad, then user will not be able to pull the image from Carkuda to Smartphone.
Sometimes Carkuda mirror will not respond to touches	This may due to long time continuous operation, environment changes, networking issues etc. Please press the middle button for > 10 seconds to reboot.

Revision History

- ## October, 2016
  - Installation Cables. Reverse video feature included

- ## September, 2016
  - Document created