

# Carkuda (VTG700X) User Manual



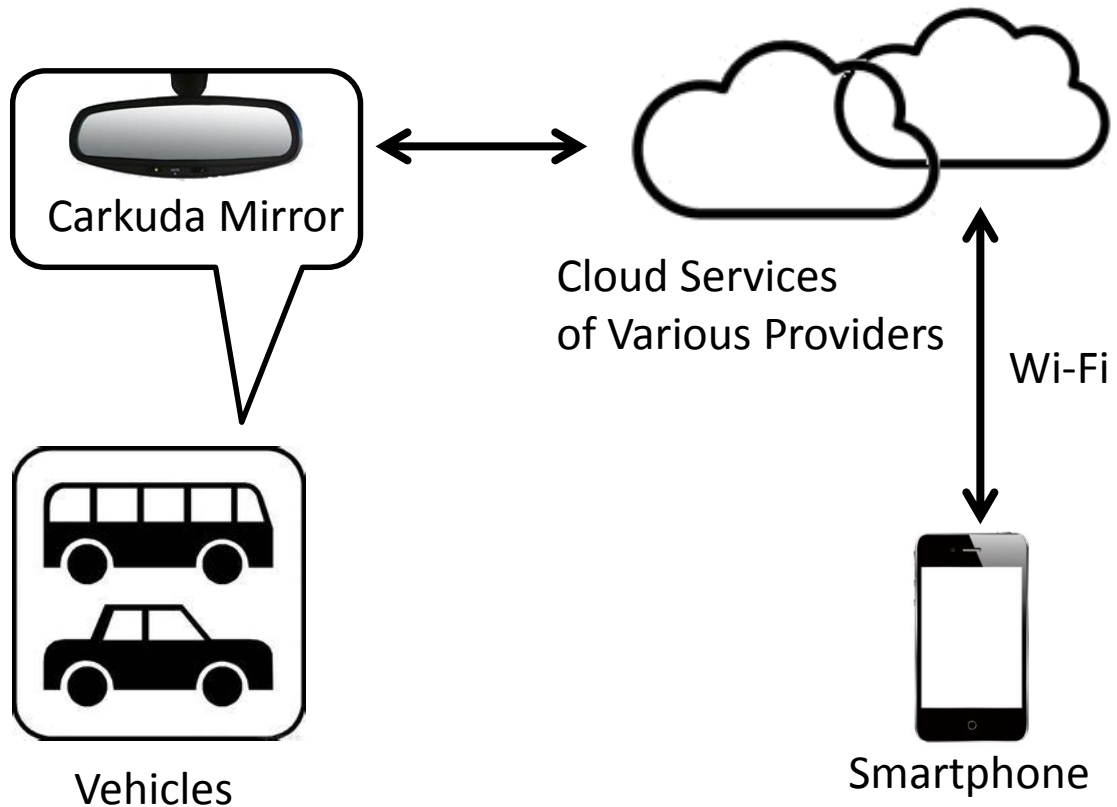
7" REARVIEW MIRROR DVR MONITOR

**BOYO®**  
2008

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- Carkuda Concepts
- Quick Start
- Installing Carkuda Mirror
- Using Carkuda Mirror
- Using Carkuda Smartphone App
- Technical Specifications
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# Carkuda Concepts



- Carkuda Mirror installs in vehicles
- Carkuda hardware connects to battery, ACC power line, reverse signal line and GPS antenna
- With Wi-Fi Data Network, mirror talks to Cloud Services
- Data network is Wi-Fi Network
- Cloud Services for example can be Google Map, WAZE, GasBuddy or manufacturer provided cloud
- User can use the touch screen to operate the Carkuda Mirror
- Smartphone connects to Carkuda via Wi-Fi network
- Smartphone can access Carkuda data from Cloud Services

# Quick Start

## Install Carkuda Mirror

- Mount, Connect, Insert SD 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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# Installing Carkuda Mirror -Mounting

- Universal Plastic Brackets



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

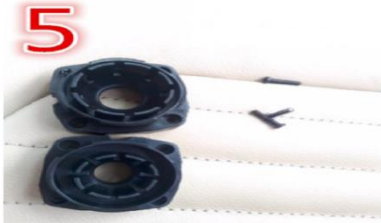
If yes, then please remove the original mirror off from the bracket.



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

The bracket kit includes 5 screws. 4 are for the installation and 1 extra for backup in case your lose one.

# Installing Carkuda Mirror -Mounting



Please select the proper size head circle according to your Existing mounting bracket. Place the plastic head and drive the 4 screws into the mirror.

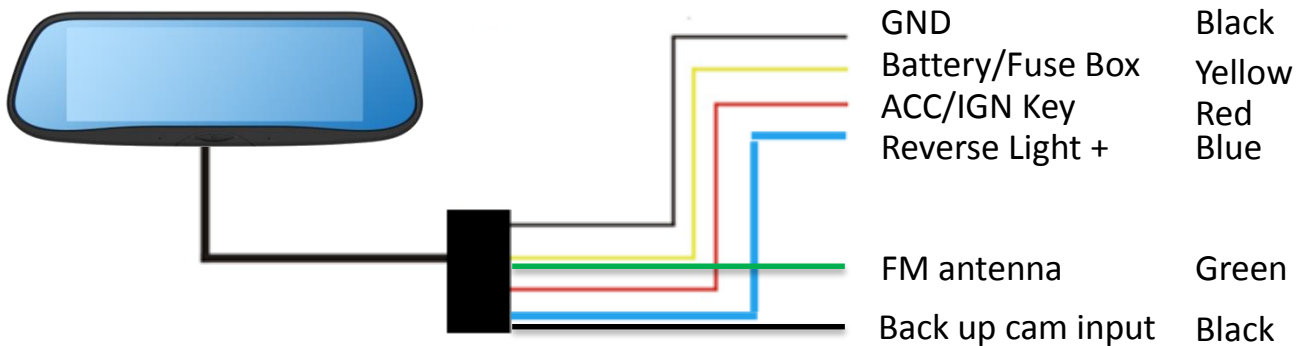


There are several sizes of ball caps, select the proper one that fits for your mounting bracket



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

# Installing Carkuda Mirror Harness



Carkuda requires constant battery power after vehicle ignition switch is turned off. This will allow users to access the Carkuda real time data remotely via Smartphone. Carkuda also needs to connect to IGN/ACC signal wire to offer security monitoring features. With IGN/ACC line connected, Carkuda can detect every IGN on or off event.

- BLACK wire to chassis ground
- YELLOW wire to 12v + battery, from the fuse box or battery
- RED wire to IGN/ACC switch, which indicates the car is on or off
- BLUE wire to reverse light + for back up camera activation  
(Optional feature if a back up camera is installed and connected)
- GREEN wire to FM antenna
- (Optional-Connect to use the FM Modulator Feature)
- YELLOW RCA plug to back up camera
- **Warnings**
- DO NOT mix the +/- battery connections.
- DO NOT connect RED wire to constant 12 volt, otherwise Carkuda cannot detect IGN/ACC is on or off
- DO NOT connect YELLOW wire to IGN/ACC power, otherwise Carkuda will shutdown itself, remote security feature will not activate.



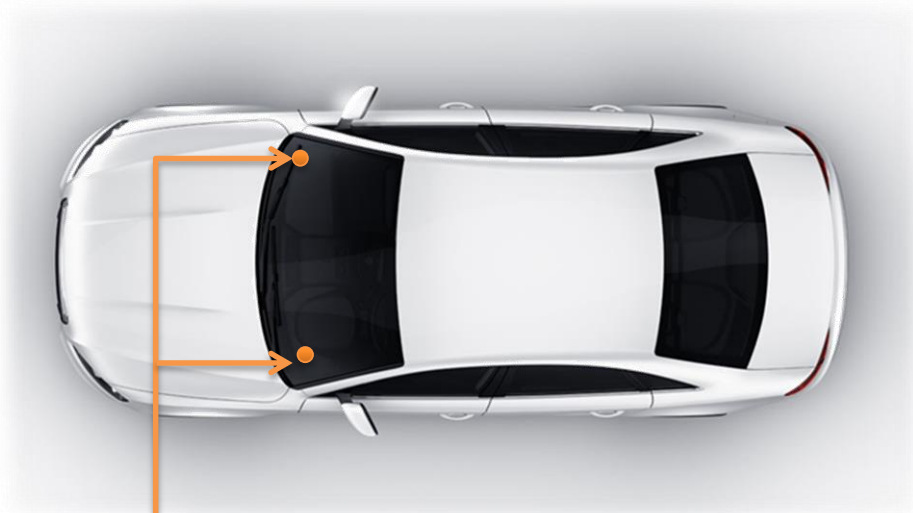
# Installing Carkuda Mirror -GPS Antenna



We have also included a GPS antenna. This antenna is used to receive GPS signal in a very fast and stable manner.

The recommended position to install the GPS antenna is the inside windshield, or on top of the dashboard.

Once the antenna is properly installed, connect the GPS antenna to Carkuda.



Recommended GPS Head Position  
Better visibility to satellites

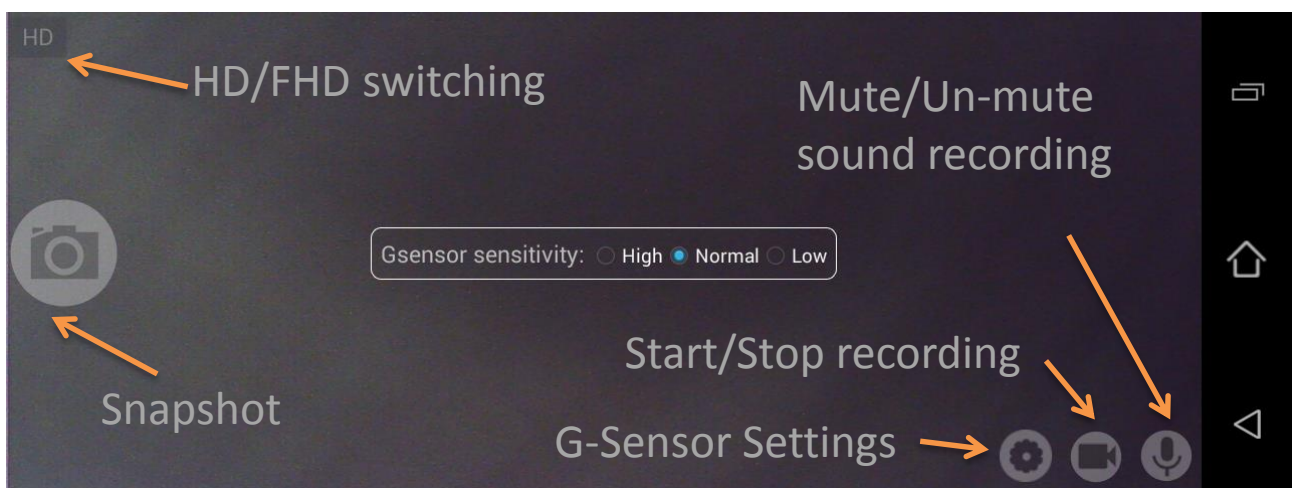
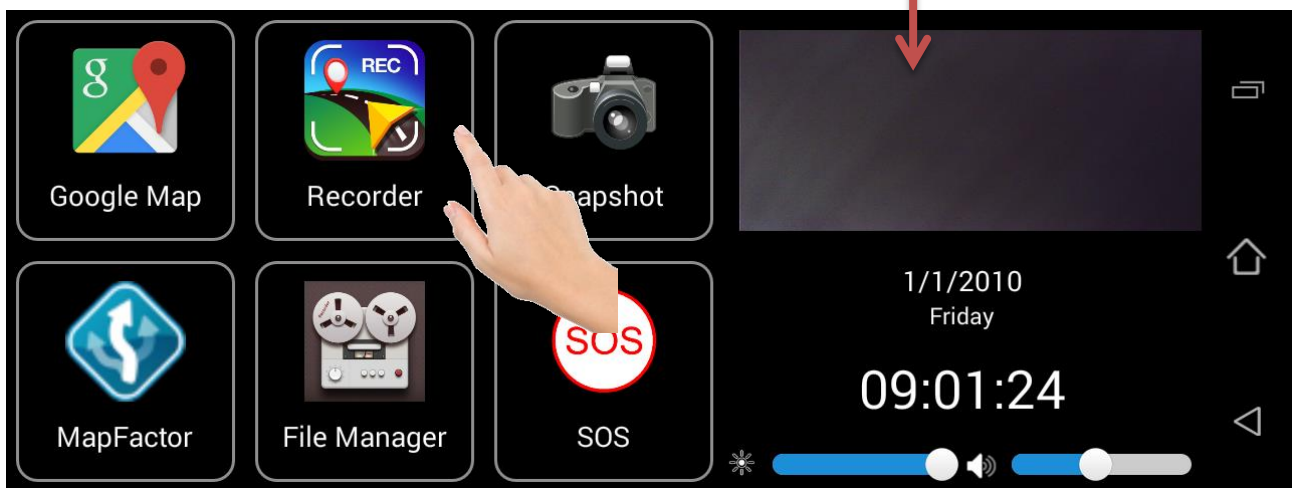
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# Using Carkuda Mirror -DVR

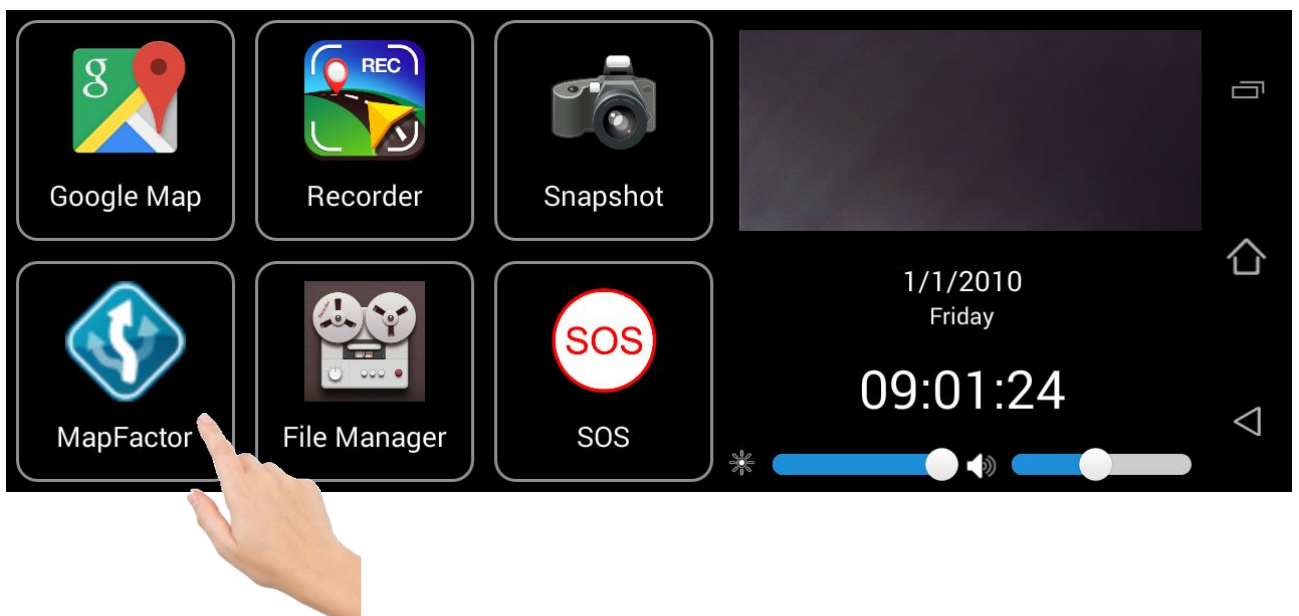
When you tap the Recorder icon. It displays the full view real time video. To review the video history, tap the File Manager icon. You can review and play back the video files on the mirror.

Real time preview window



# Using Carkuda Mirror -Navigation Apps

Carkuda supports various navigation systems like Google Map, MapFactor, WAZE, Yahoo Map and many more. The user experience is the same as what we have on the Smartphone.

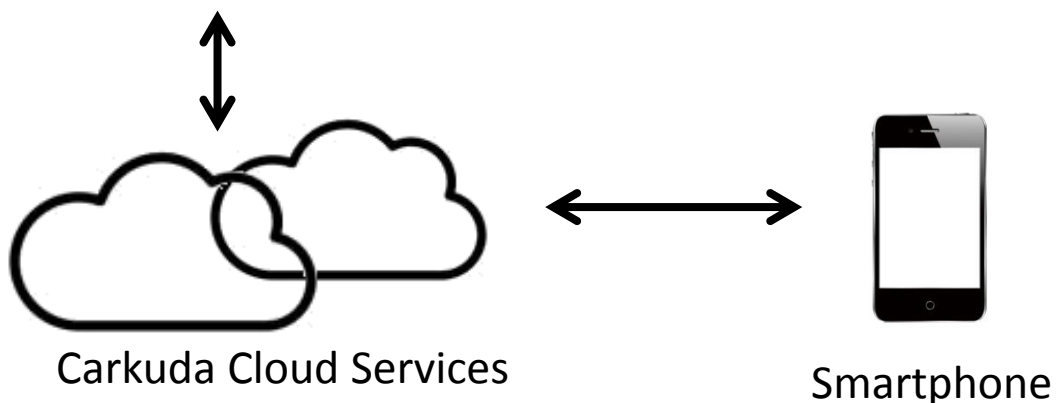
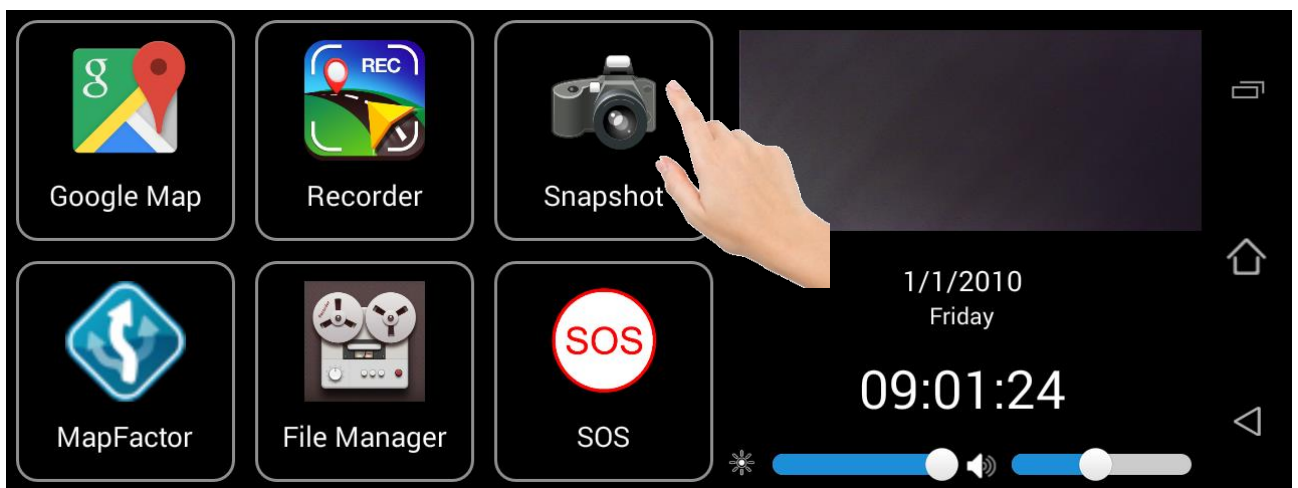


## Note

- Google Map requires a data connection to function.
- MapFactor is pre-loaded with TOM TOM offline map data
- Carkuda can accommodate different navigation apps (online or offline)

# Using Carkuda Mirror -Snapshots

When driving, the driver can instantly tap the Snapshot icon, Carkuda will capture the image from the front camera and save it in the File Manager or it can upload to the Cloud Server, which can be synchronized to your Smartphone app automatically. Cloud Server requires a Wi-Fi data connection.

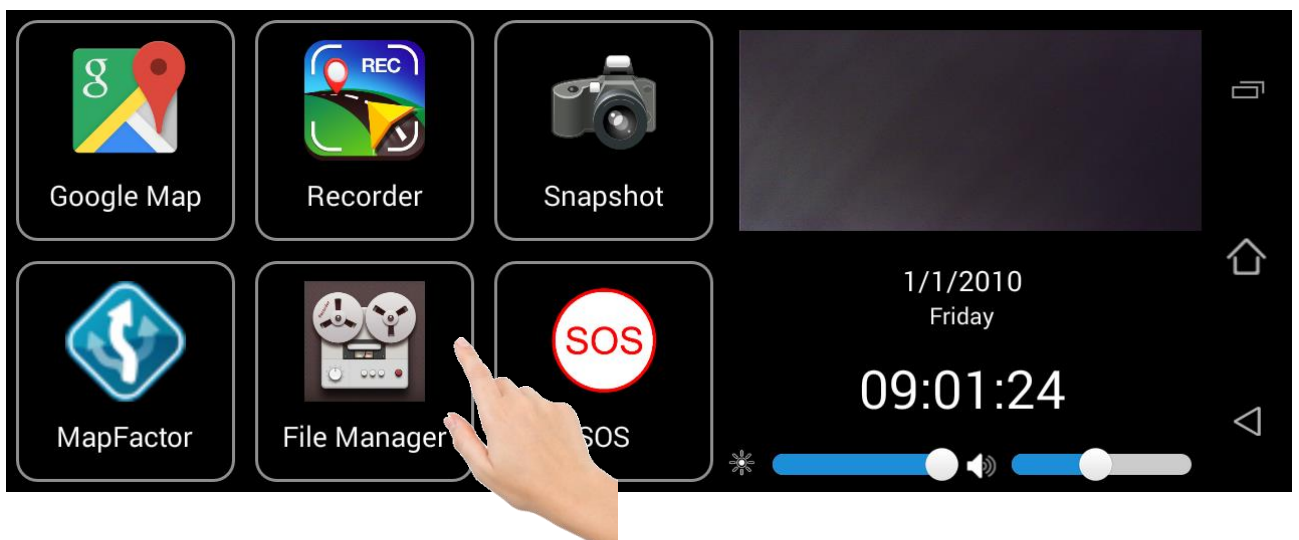


## Note:

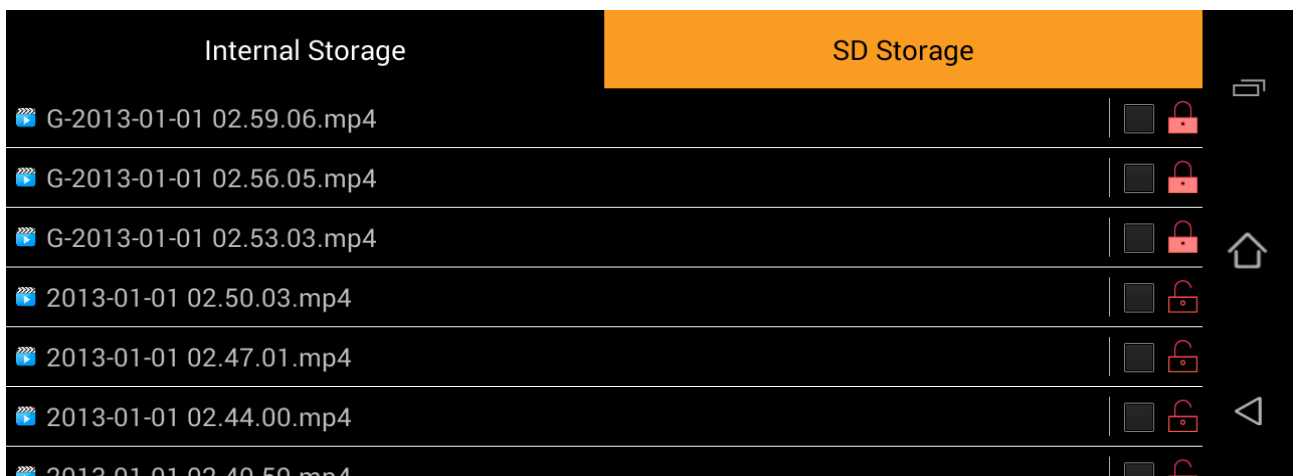
- The Carkuda requires a Wi-Fi data connection to synchronize photos.
- Carkuda currently offers Cloud Storage for all end users.

# Using Carkuda Mirror -File Manager

Tap the File Manager icon, users can access DVR videos and photo history, delete or lock DVR videos and snapshot photos, clean up SD Storage or Internal Storage space.

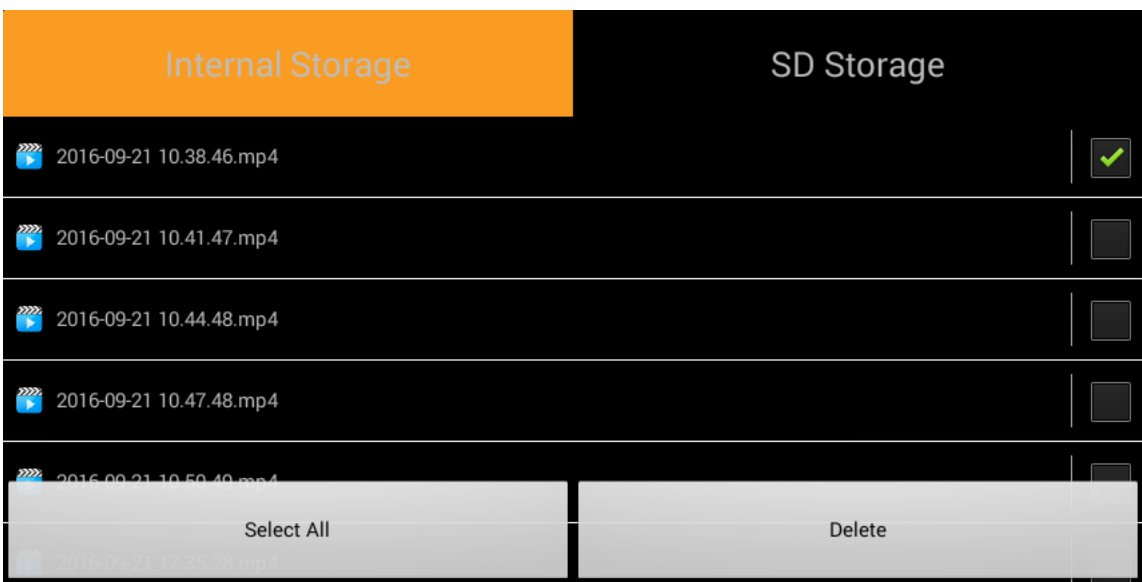
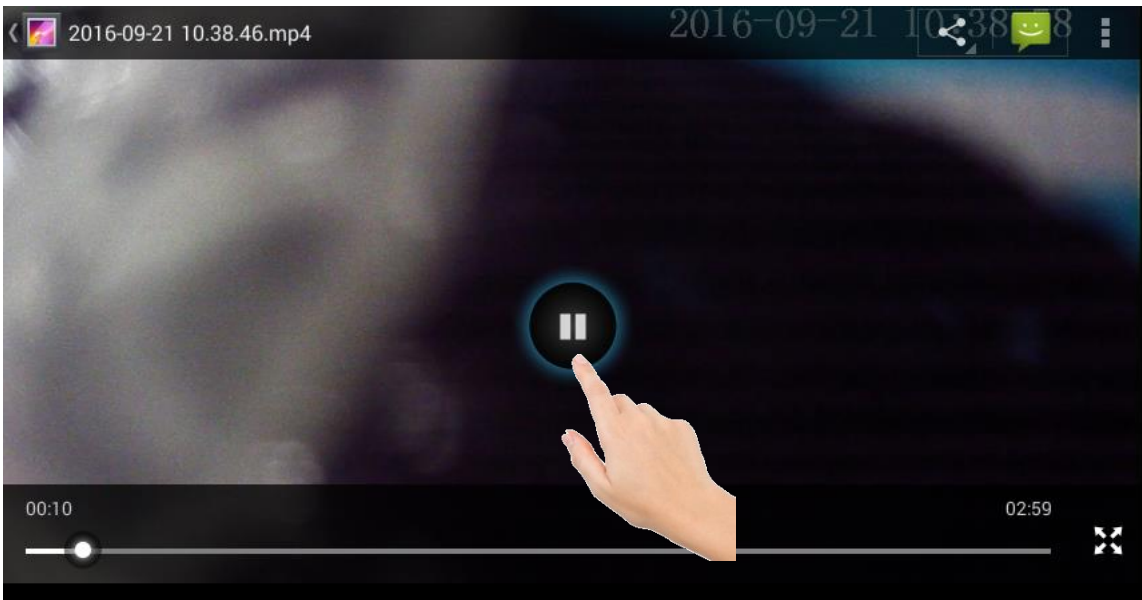


For files that start with letter “G”, it is clocked by G-Sensor detection during hard brake or collision. These files will not be recycled automatically. Users can delete them manually.



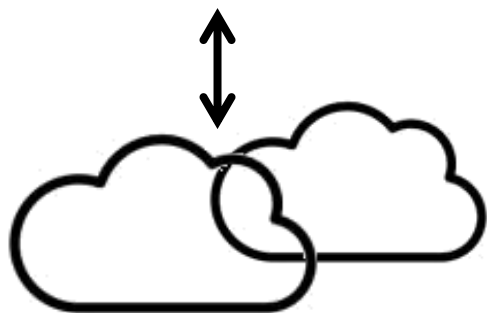
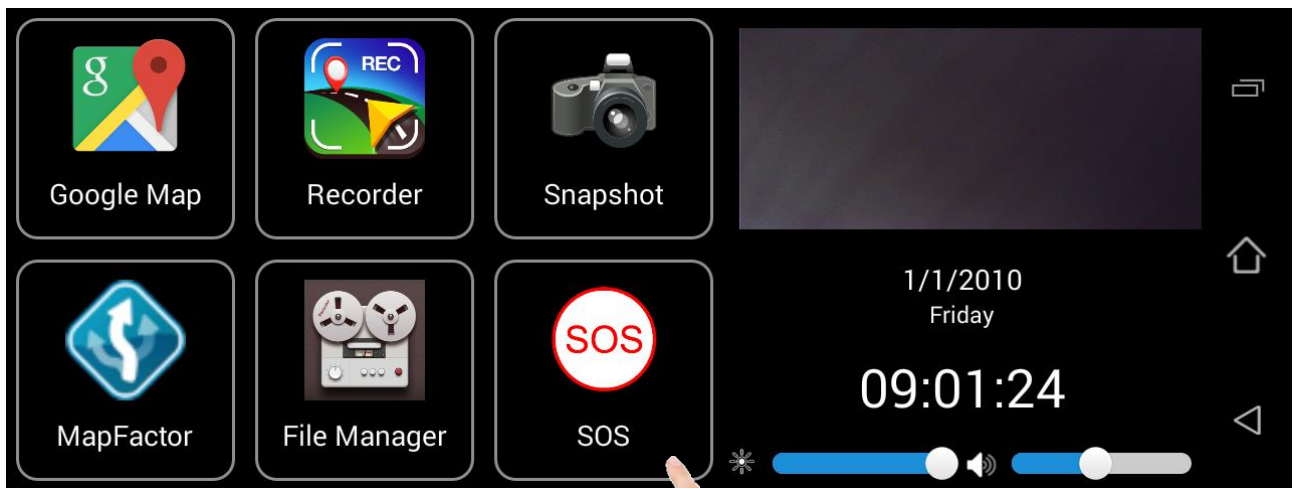
# Using Carkuda Mirror -File Manager

To play videos, click on the file you wish to .  
Press return arrow on left-bottom to quit playing.  
User can lock, select and delete the files as needed.



# Using Carkuda Mirror -SOS Email

Once SOS icon is tapped, the emergency contact person will receive an email alert with real time address and images attached. Wi-Fi data connection required.



Carkuda Service Cloud



PC or Smartphone

## Note

- Carkuda Email SOS alert is offered to users globally.
- Carkuda does not guarantee the delivery of E-mail due to various network situations, different mail servers, etc.
- Carkuda takes no responsibility if the email is lost.
- 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 Carkuda.

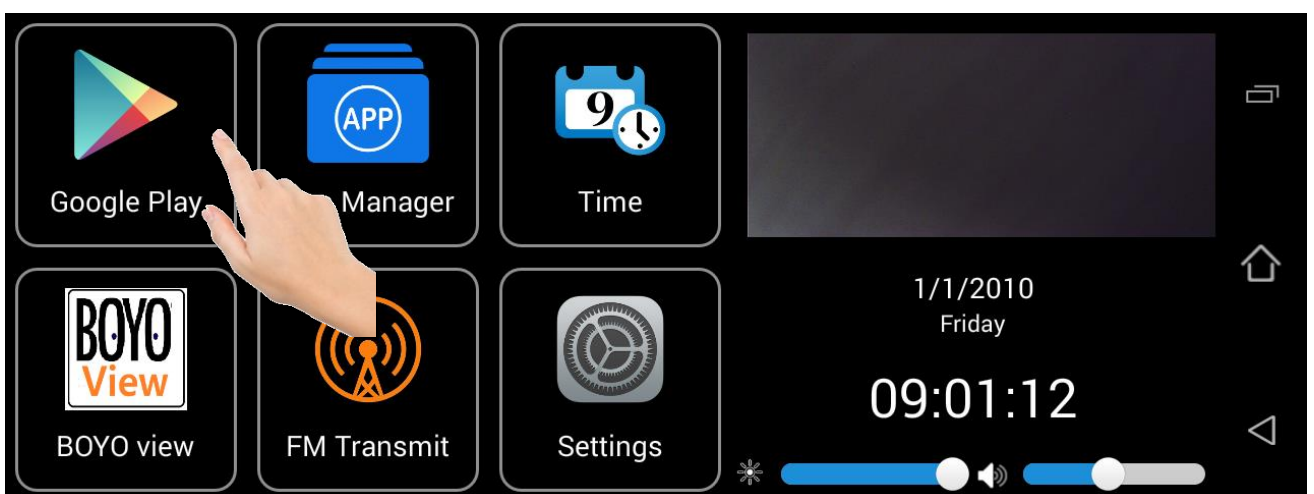
Once new apps are installed, user can find new icons in the new pages.

For performance purpose, Carkuda recommends user to install limited number of Apps. (5 Apps or less)

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

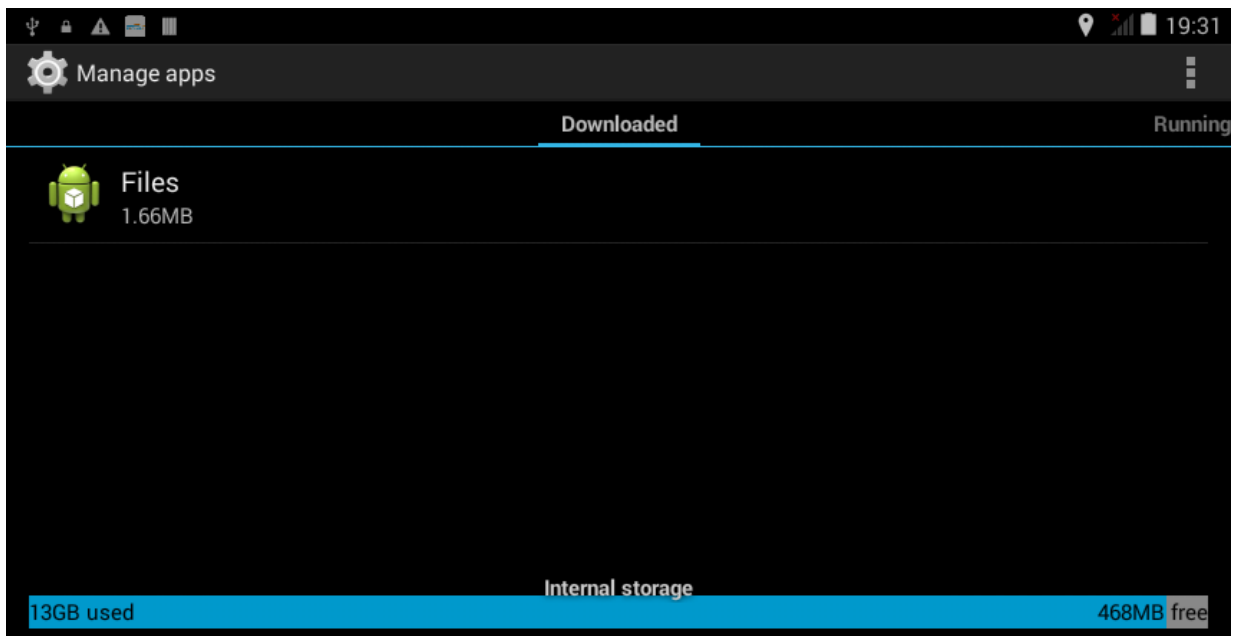
Google Play need Wi-Fi data connections to download Apps.

Google Play requires a Google user account to log in.



# Using Carkuda Mirror -App Manager

To remove an App, tap App Manager, choose the App to be removed, Tap uninstall. The Carkuda will reboot after deleting the App. Users can Force Stop or Suspend an App in App Manager.



# Using Carkuda Mirror -Date and Time

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

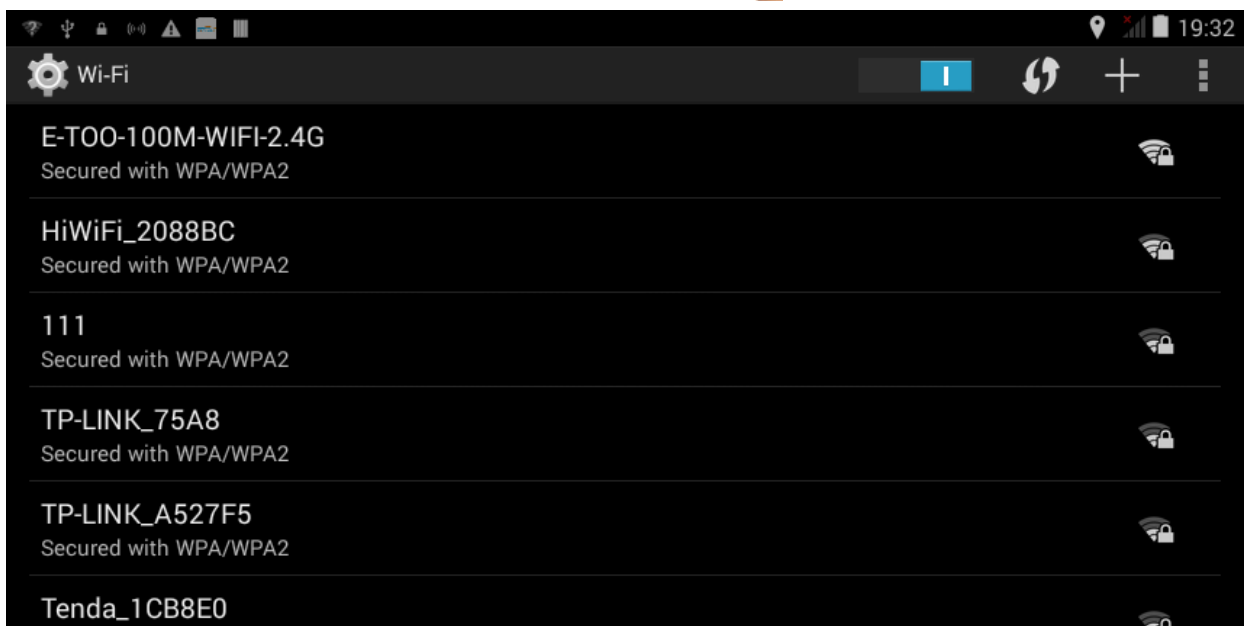


## Note

- We also recommend users to stay on the default settings. You can turn to GPS timing for automatic date and time adjustments.
- Carkuda will synchronize the date and time automatically with the network server or GPS during normal operation.
- **Carkuda mirror MUST have correct date and time to upload images, alerts, videos to the Cloud Server.**

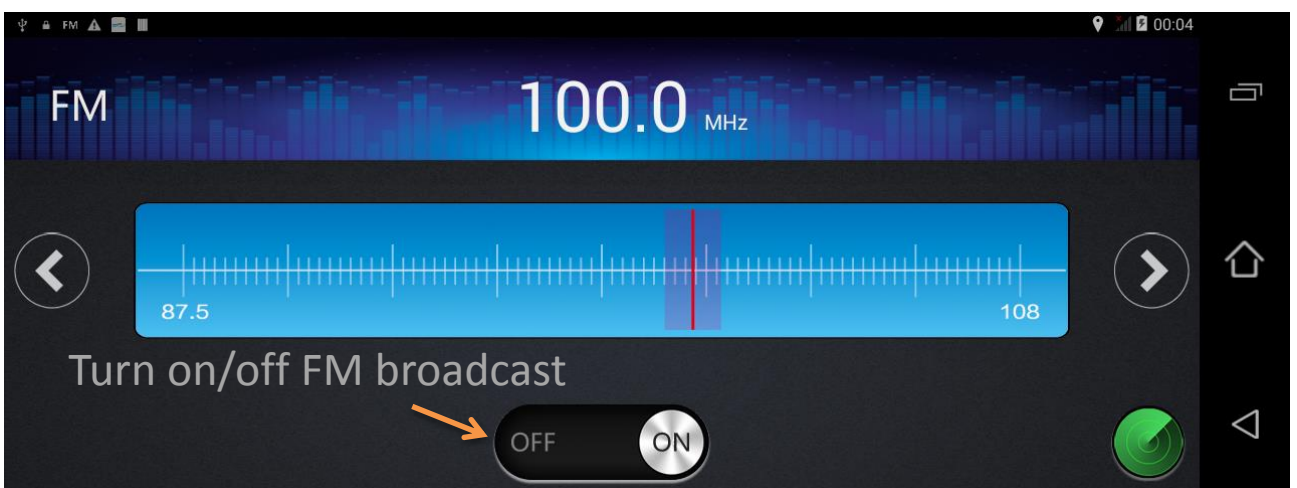
# Using Carkuda Mirror -Wi-Fi Network

Carkuda supports Wi-Fi connection. If there are Wi-Fi networks nearby, users can click on the Wi-Fi settings, scan and log into Wi-Fi networks. Typically, Wi-Fi network comes from Smartphone hotspot or dedicated Wi-Fi routers.

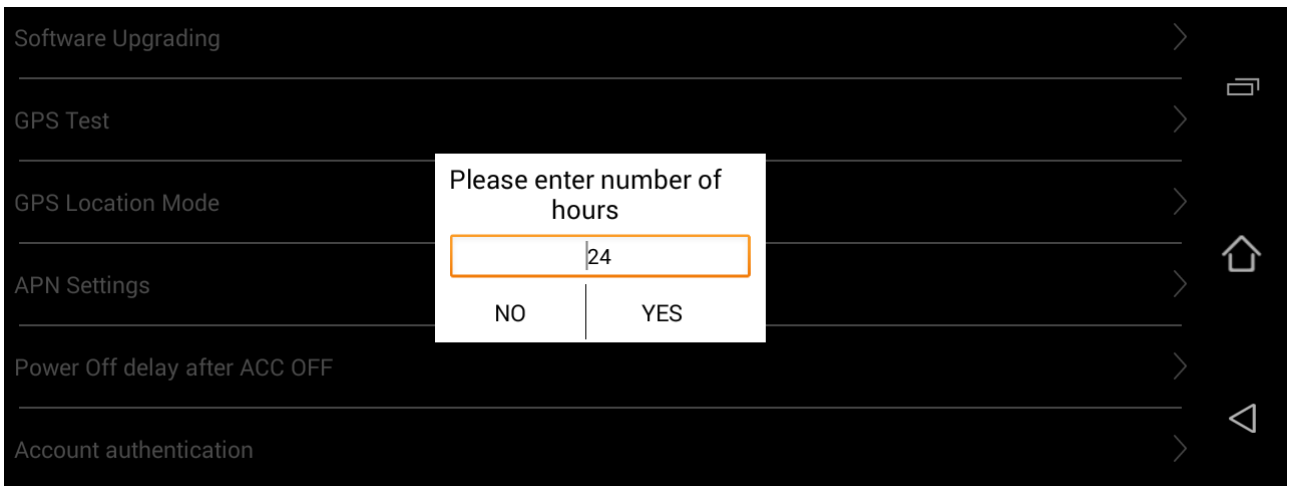


# Using Carkuda Mirror -FM Transmitter

Tap FM Transmit icon, Set Carkuda and radio to the same frequency to connect to radio speakers. Carkuda sound will now broadcast through your radio. Turn off the FM broadcast to return to Carkuda speaker.



# Using Carkuda Mirror -Shutdown Delay



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

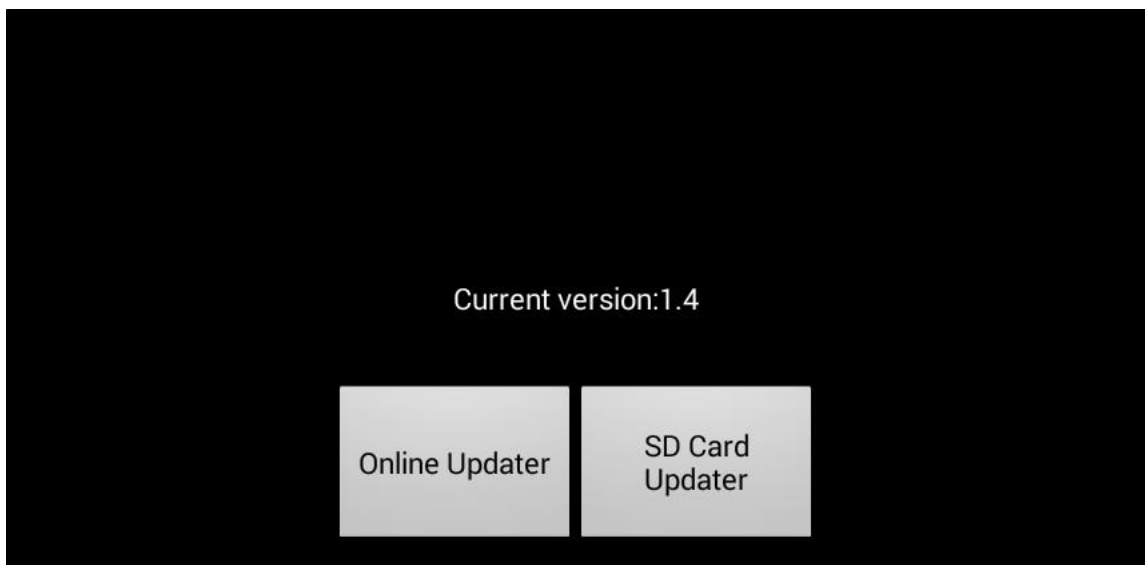
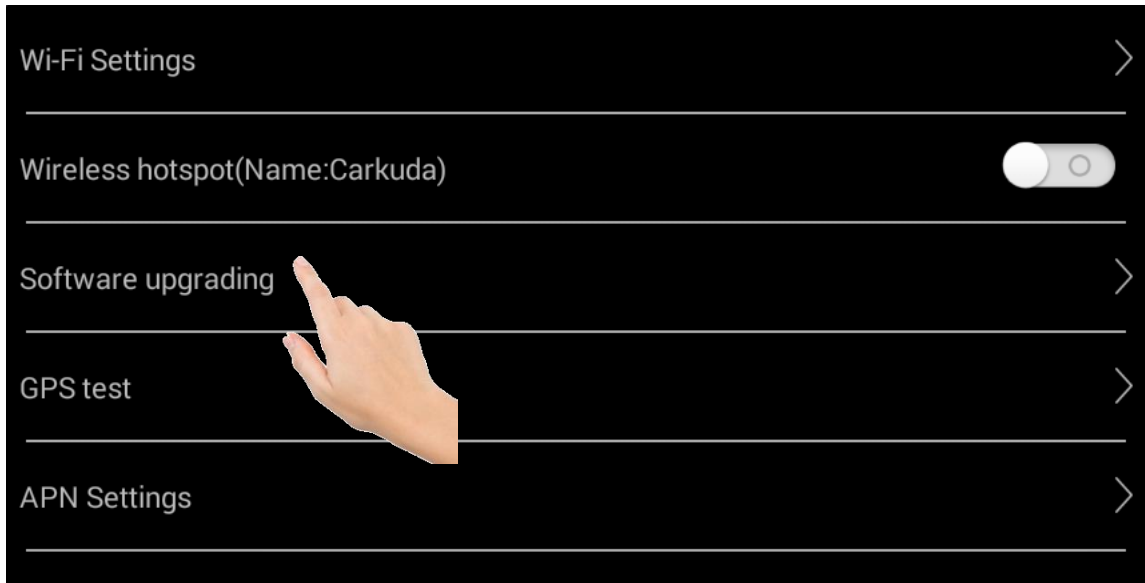
Since we offer remote security feature, Carkuda will be in a standby mode after vehicle is off. It will stay connected to the data network and respond to remote users request.

And by default, after 17 hours, Carkuda will shutdown to avoid draining the vehicles battery power.

To change the shutdown delay, navigate to the settings' last menu, type in the number of hours and tap YES.

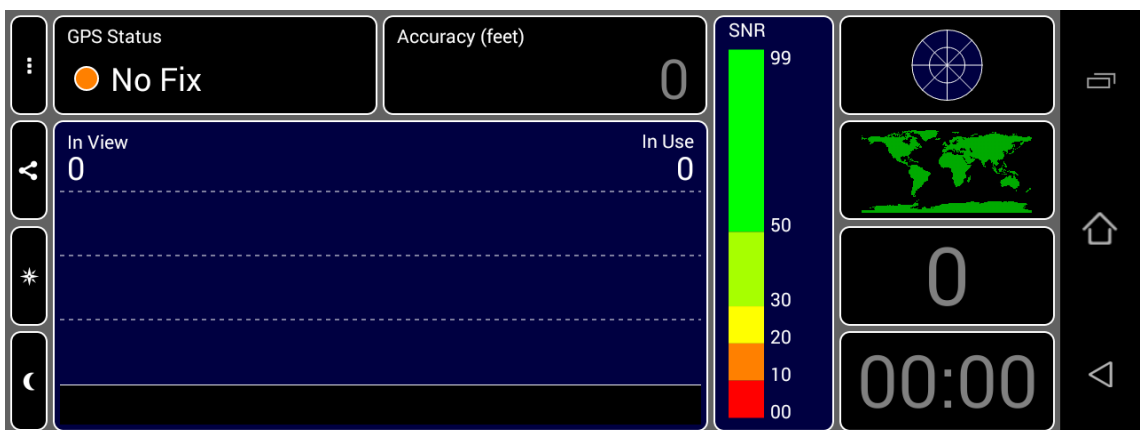
# Using Carkuda Mirror -Software Upgrade

Carkuda offers online and SD card updates.  
Online update requires a Wi-Fi data connection.  
SD card update files will be available for download.



# Using Carkuda Mirror -GPS test

GPS test offer users 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 case that users experience:

- Screen freeze
- Touch pad not responding
- Installing a new SD card

... etc.

Users can press and hold the middle button on the front face for approximately ten seconds. Carkuda will flash the screen and reboot.

If other issues, please contact your local retailer..

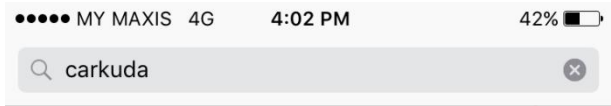
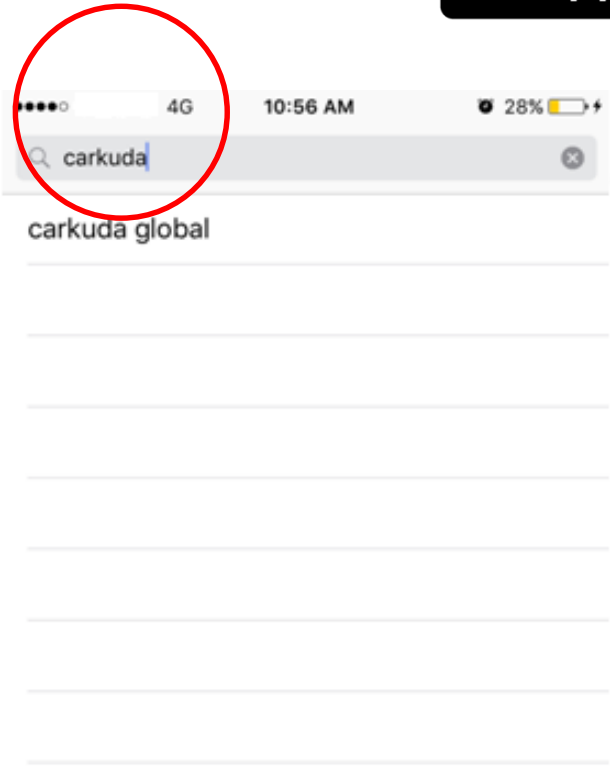
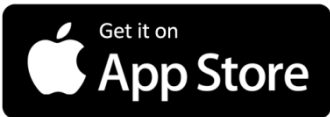


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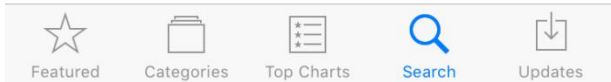
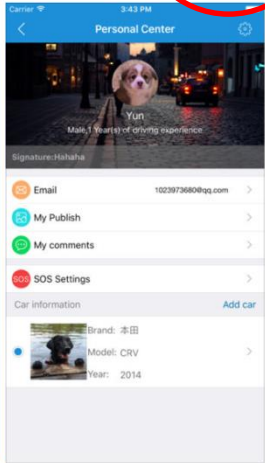
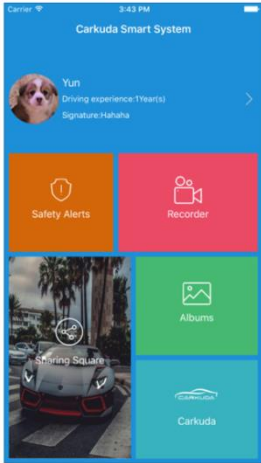
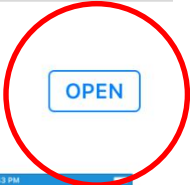
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# Using Carkuda Smartphone App- Installing App

Please search for "carkuda" in AppStore or Google Play Store. Please install [ **Carkuda Global** ] App.

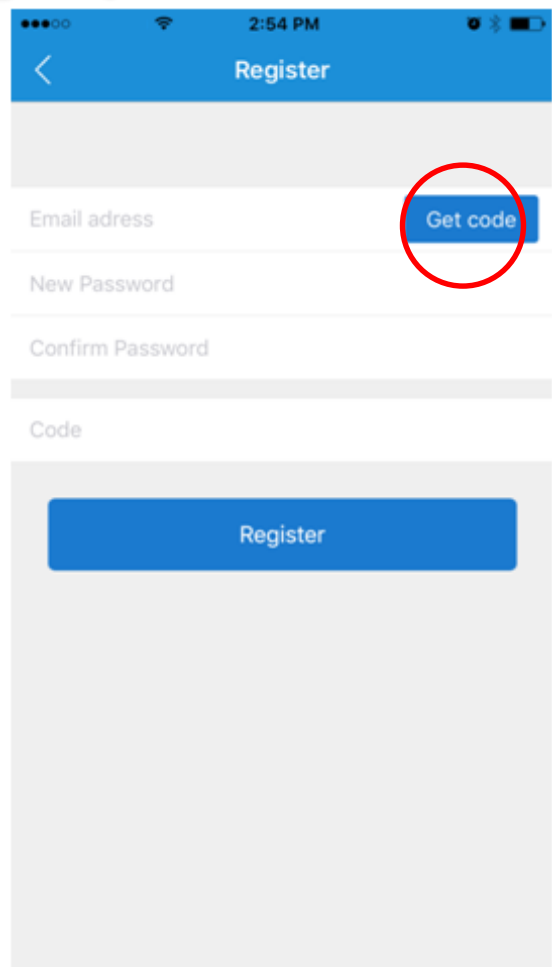
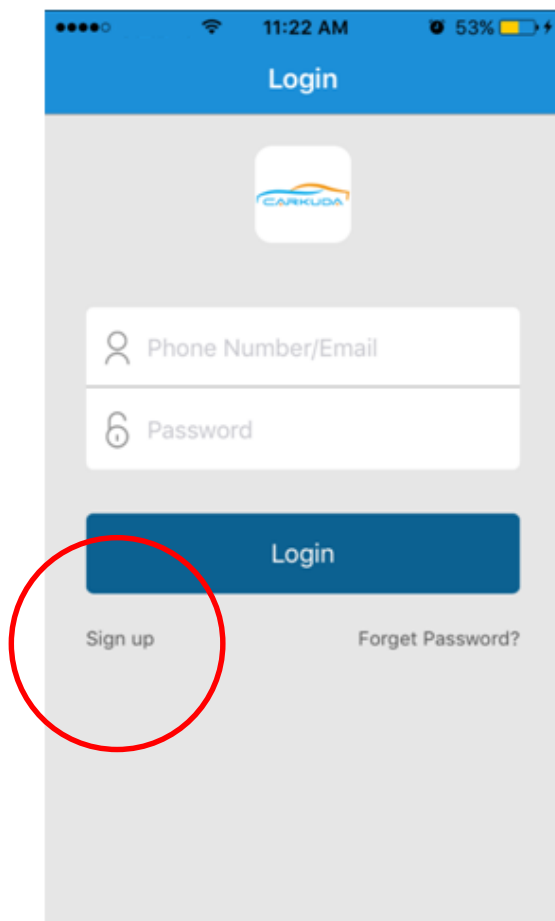


Carkuda Global  
Guangzhou To-car CZD Ltd.



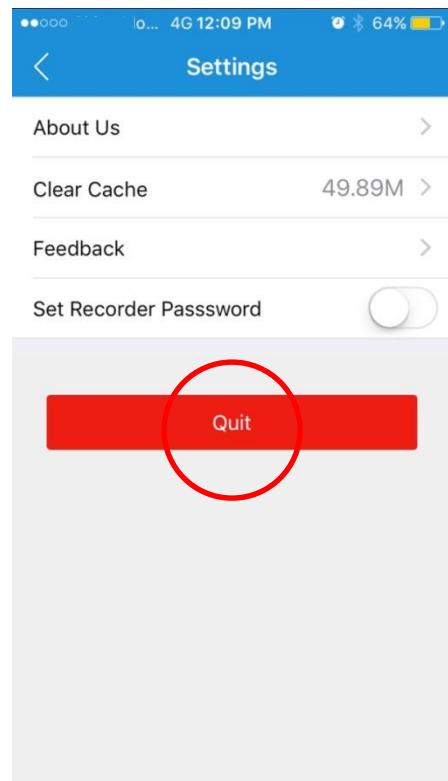
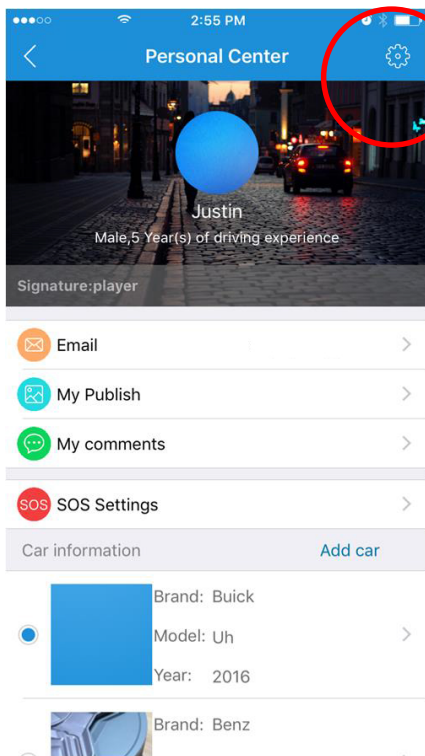
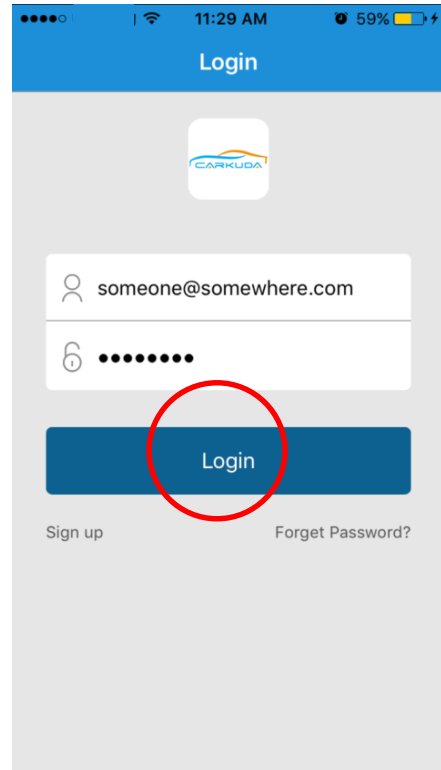
# Using Carkuda Smartphone App- Create User Account

Users can register their account by providing a valid email address, then tap Get code and setup the password. Sometimes, the verification code email may be 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.

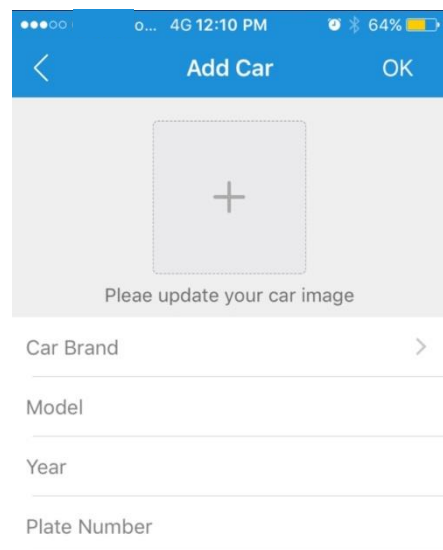
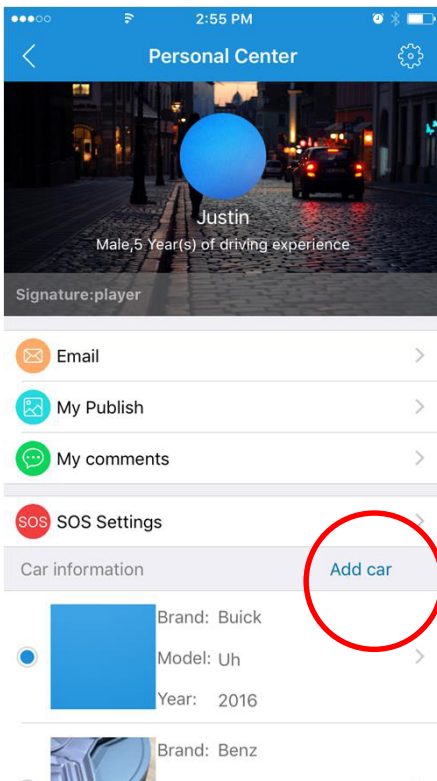
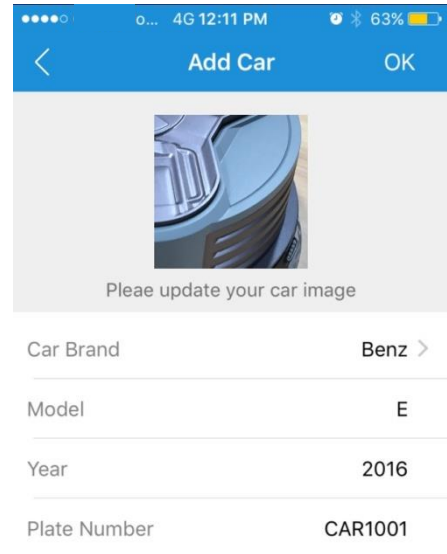


# Using Carkuda Smartphone App- Create Vehicle Info

After login, users need to input the vehicle and Carkuda mirror information to link all the devices together.

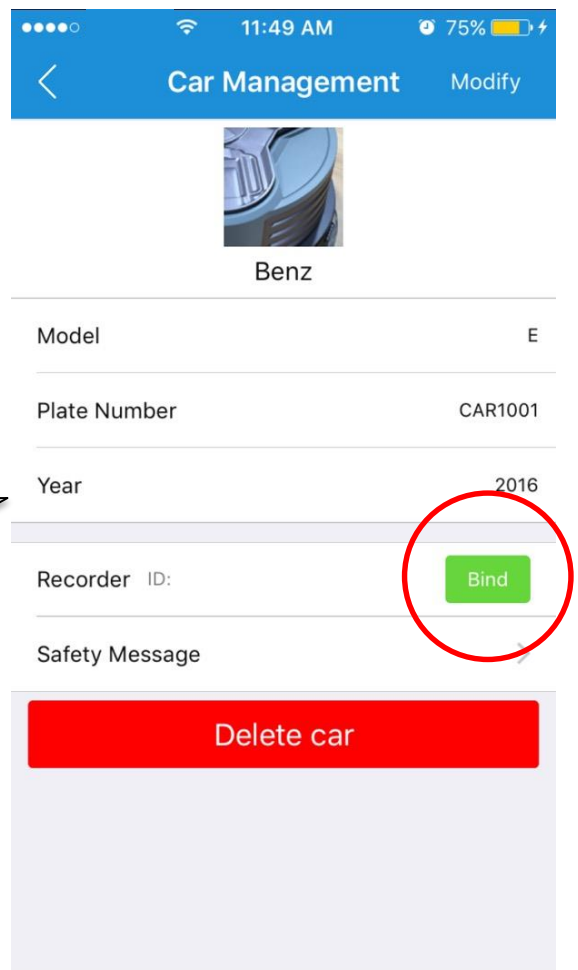
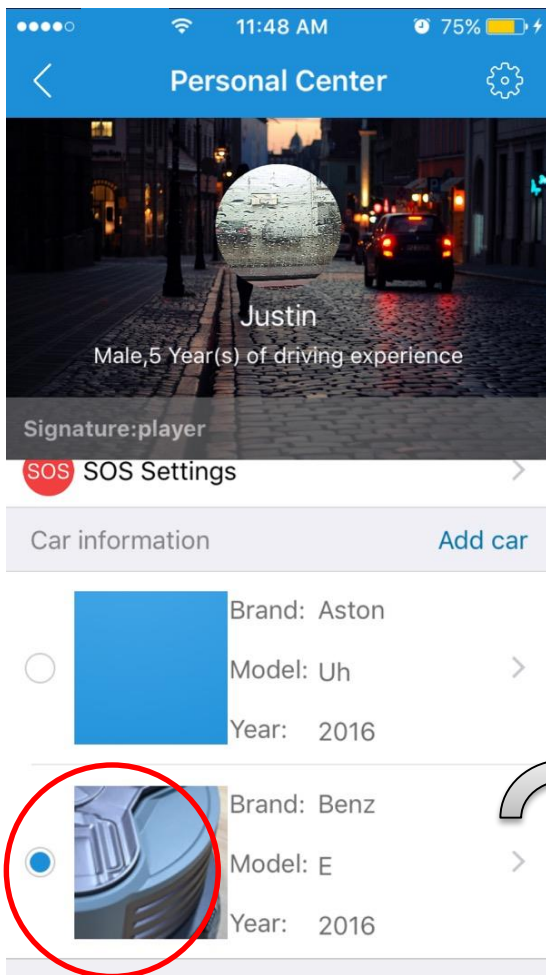
In [Personal Center], you can input vehicle info by clicking [Add car]. In the new page, please provide the vehicle image, brand, model, year and license plate number.

**Carkuda App support Max. 10 cars for one account.**



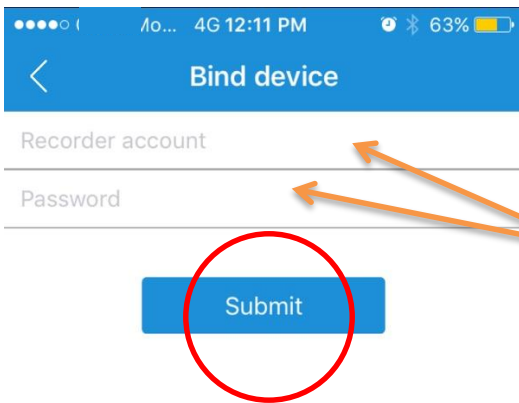
# Using Carkuda Smartphone App- Binding Mirror with Vehicle

Bind the Carkuda info onto the same vehicle. Tap the green Bind icon and provide the Carkuda 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 located on the top of Carkuda mirror.



## Note

- For security and privacy purpose, Carkuda system will allow only one account for the owner to bind a device.
- This exclusive right maximize the data security (ACC record, GPS track, live images etc.)
- Before another account can access the Carkuda data, the user would have to un-bind the Carkuda mirror to release this exclusive right.

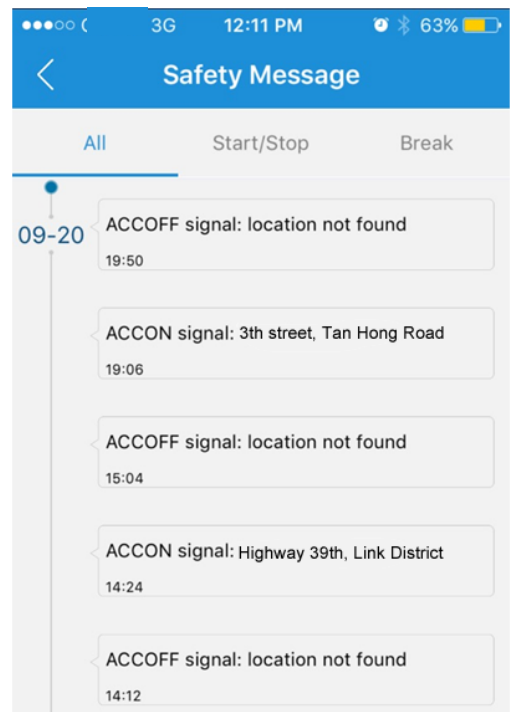
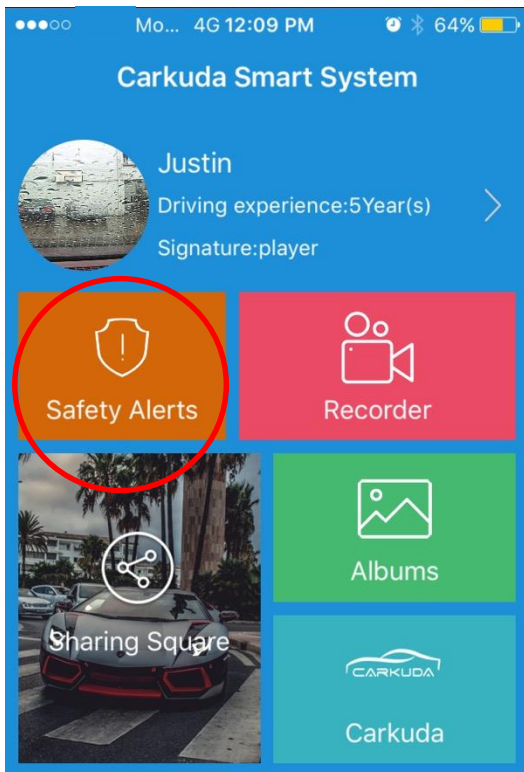


# Using Carkuda Smartphone App- Safety Alerts

The first block is safety message. It records IGN/ACC on and off, with time and location.

## Note

The locations names depend on the GPS signal. If no signal, then the location will be recorded as [location not found].

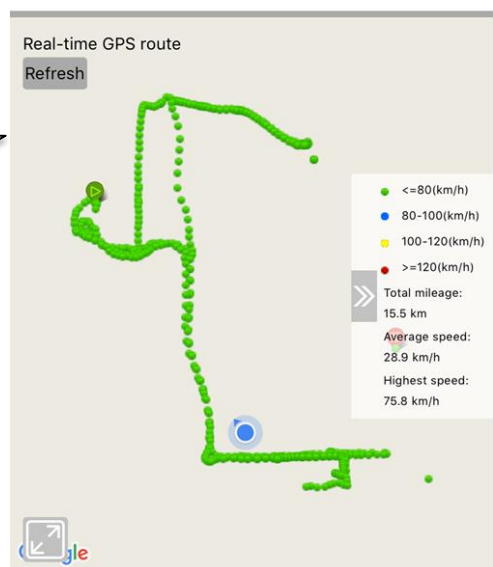
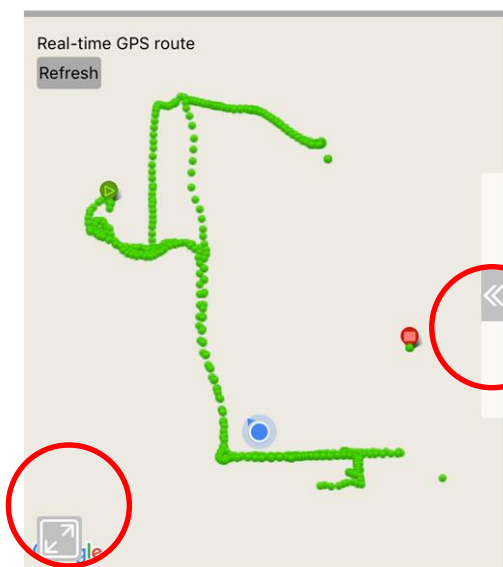
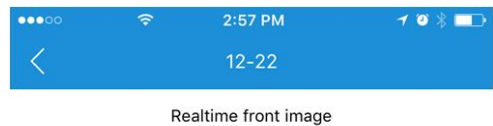
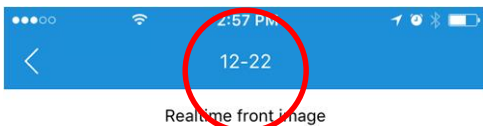
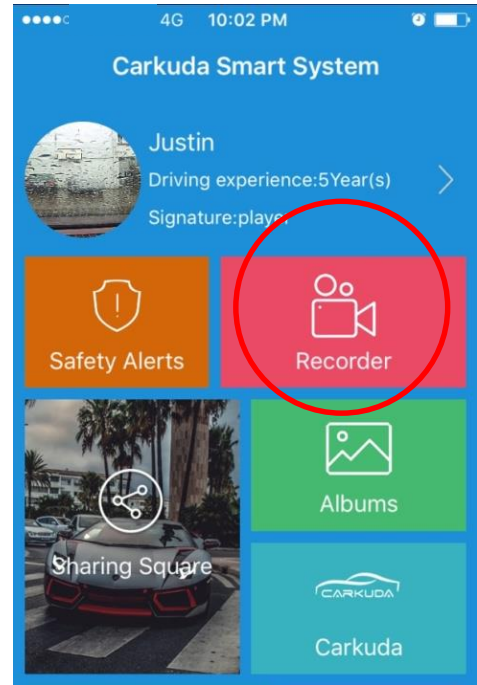


# Using Carkuda Smartphone App- GPS Tracker

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

Distinguished by different colors, users are able to check where they drove over the speed limit.

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



# Using Carkuda Smartphone App- Live Image Feedback

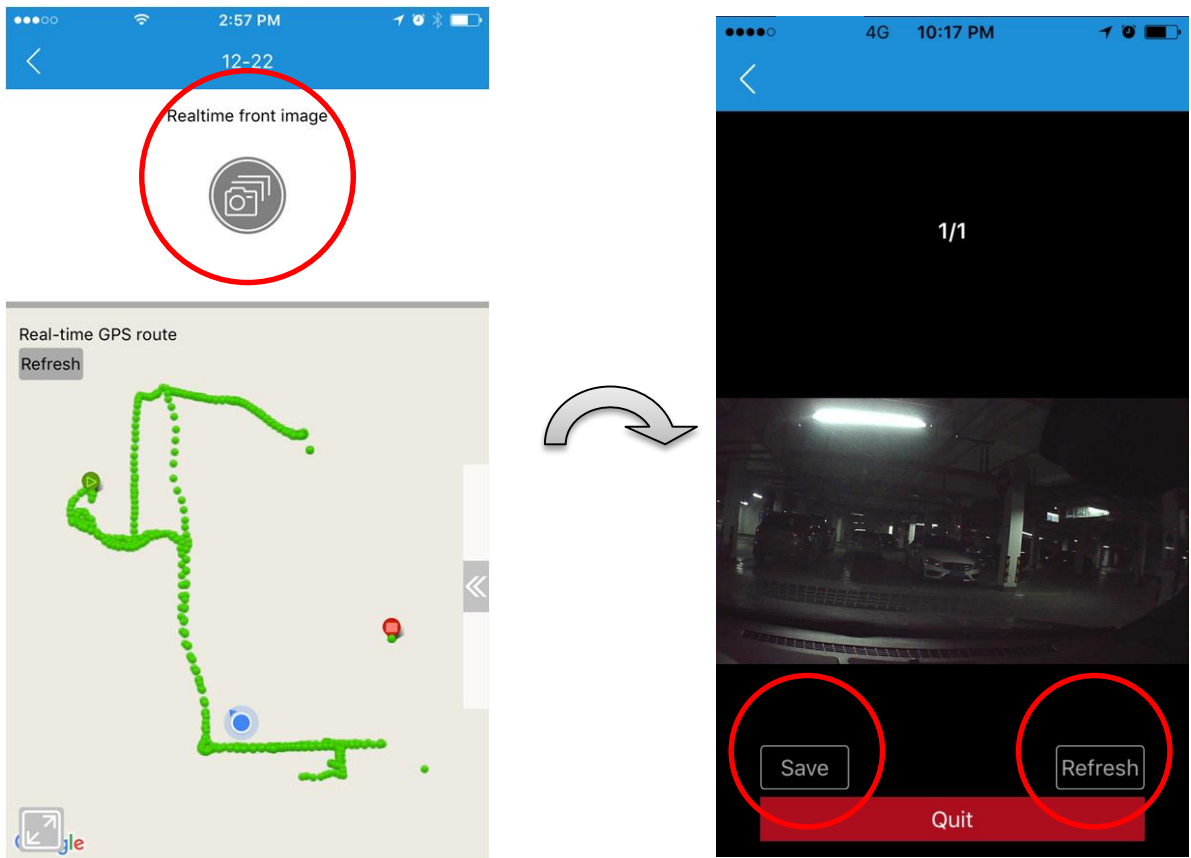
Tap the image button and wait, users can see the front camera real-time image feedback.

## Note

Carkuda VTG700X supports single front camera.

Due to different data network situations, users may experience different delay times while waiting for image feedback.

Users can save the image by tapping [Save] on left-bottom. Or tap [Refresh] to request for new images.

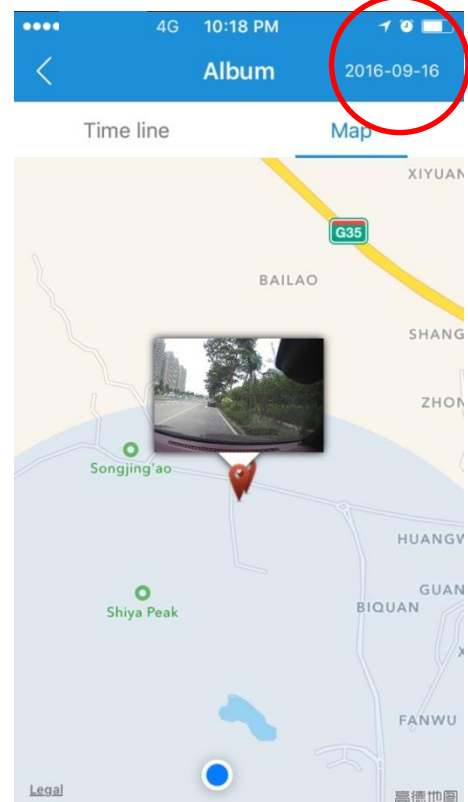
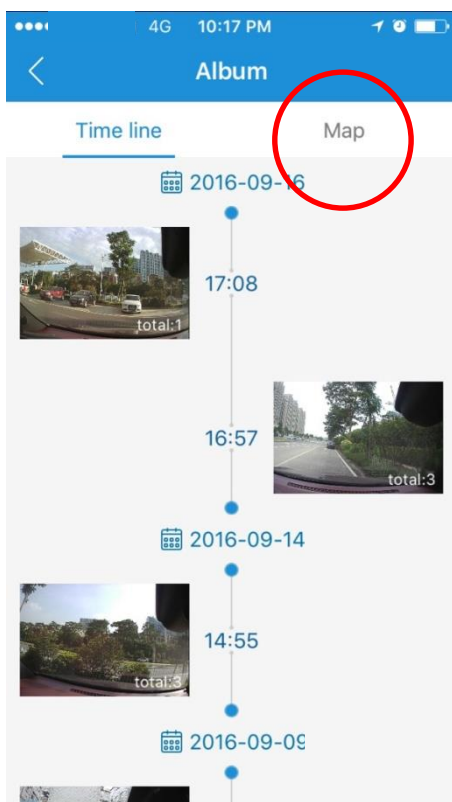
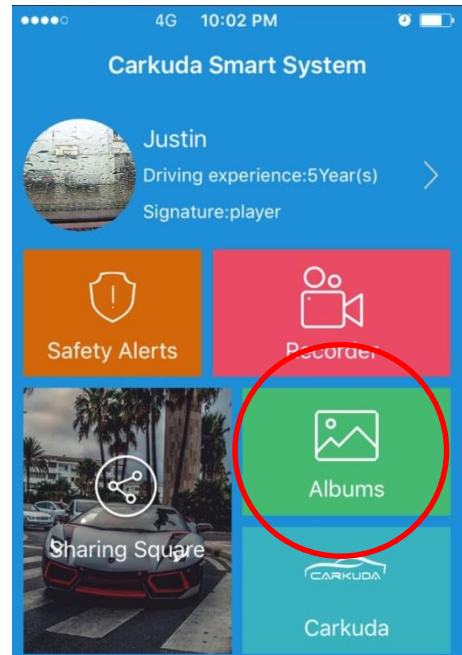


# Using Carkuda Smartphone App- Photo Albums

The third block is Albums, the photos are all snapshots taken from the Carkuda mirror.

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

Search by date is possible by scrolling to date requested.



# 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	7 inches, IPS touch screen 480x1280
	Main Camera	Front facing camera, at 720P or 1080P selectable by user
	Rear Camera	480P, AV-IN
	MIC	Support
	ACC detection	Support
	Micro-SD Card	Support Micro-SD, Maximum 32GB
Sensors	G-sensor	Collision Detect
	Radar	No Support
Software	OS Base	Android 4.4
	FM transmitter	Support
	Media Playback	Support
	Rear Camera	Support for rear camera video
	Smartphone	Support App Data Synchronization
Physicals	Size (in)	10.6"x3.54"x1.83"
	Languages	English, Chinese, Russian, Japanese
	System Memory	1GB DDR3+16GB eMMC
	CPU	MTK 8382
	Working Temperatures	4~158 F
	Humidity	95%RH (at 113 F)

# Packing List

<b>Name</b>	<b>Quantity</b>	<b>Note</b>
Carkuda VTG700X Mirror	1	
Main Harness	1	
Mounting Brackets	1	Black color
GPS Antenna	1	
User Manual	1	

# FAQs

## Questions

## Answers

Is the Smartphone app free?

The Carkuda Smartphone App is available for download at the App store at no charge.

Is the Carkuda Mirror Cloud Service free?

Currently it is free-of-charge, later if Carkuda offers premium services or Carkuda partners offer extra services, there may be reasonable fee. It will not affect existing services.

How do I make sure Carkuda does not run my vehicle battery down?

Users can adjust the Power off delay time from the [Settings] page. To adjust the delay from 24 hours down to 1 hour.

Why can't I get the real time front image from the Carkuda App?

It depends on the data connection status. If the signal of network is bad, the user will not be able to pull the image from the Carkuda Mirror to the Smartphone.

My Carkuda Mirror touchscreen will not respond to touches.

This may be due to long continuous operation, environmental changes, network issues, etc. Press the middle button for > 10 seconds to reboot the Carkuda Mirror.