

**GeekOBD**

Driving life is under control

# V5.0 User Guide

**Beijing Mentalroad Technology Co. Ltd.**

## 1.Download the software

GeekOBD is a software aimed at the vehicle owner, match up with “MOBD”(vehicle detect adapter),it can offer you various kinds of service.

### 【Security assurance】

- Timely early warning while the car is under bad condition and the warning program can be expanded.
- All around scan of the vehicle, humanizing fault reading.
- It can diagnose itself, carry the fault diagnosis tester with it.
- The data can be self-recording in order to search the hidden danger.

### 【Energy conservation, oil saving】

- Exact assessment of oil consumption
- Absolutely clear of instant oil consumption, average oil consumption, fuel costs
- The oil consumption map can bring you a brand new show of fuel.
- Driving analysis of sudden brake
- Remind you the bad driving habit.

### 【Treasure to upgrade your car】

- Forge the exclusive HUD displayer and instrument panel.
- Infinite extension of the detection program and early warning program.
- Statistic the time and the space, show the driving data all around.
- Trend analysis summary statistics, map analysis, all covered.
- Support updating the firmware, constantly create a new way to play

### Download the software



## 2. Matched vehicle detect adapter MOBD



### Specification parameter

- Core processor: ARM Cortex-M3 core 32 processor
- Communication mode: Bluetooth double mode
- Storage: Support the TF expand card
- Software platform: Support Android/IOS
- Sizes: Length 46mm,width 23mm,height 36mm
- Working voltage:9V-15V
- Working temperature:-40°C~85°C
- Working humidity: less than 60%

### Product feature

#### Compatible for Android / IOS platform

Bluetooth double mode: Support blue tooth 4.0BLE and blue tooth 2.0 data communication

#### Driving data black box, any data can be found.

The data can be saved to the TF card when the mobile phone is unconnected, it's easier to find the hidden danger.

#### Carry the alarm apparatus with it, can not miss any unusual notice.

It can give an alarm without a phone by issue different kinds of voice.

#### High-performance processor

The firmware is able to update Italian and French semiconductor STM32 processor, ARM cortex-M3 inner core 32 dot processor. It can insure the stable and efficient data dispose.

#### Low consumption energy saving mode, intelligent sleep mode to storage battery

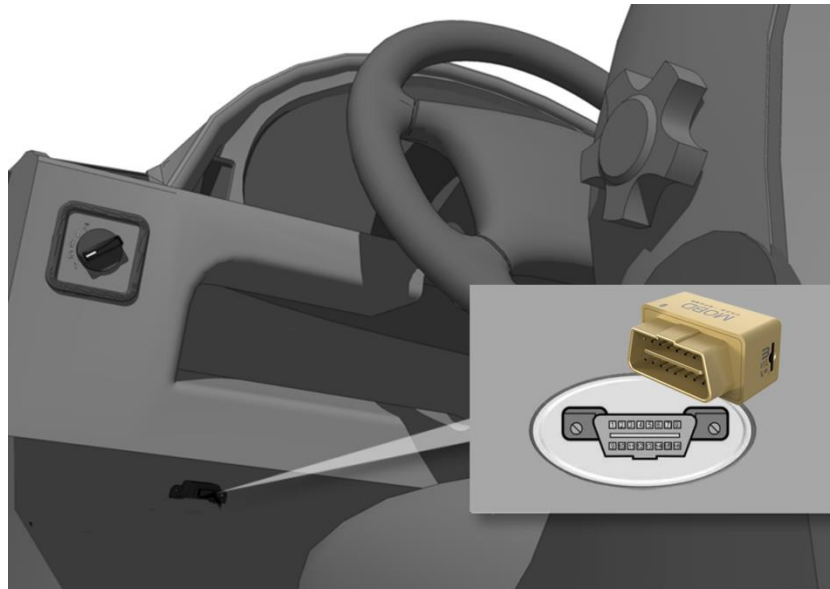
It can avoid the harm caused by continue electric discharge.

Sleep when flame out, awake when start.It can reduce the whole system's energy consumption, the electric current while sleep is less than 1mA

### 3. Quick start guide

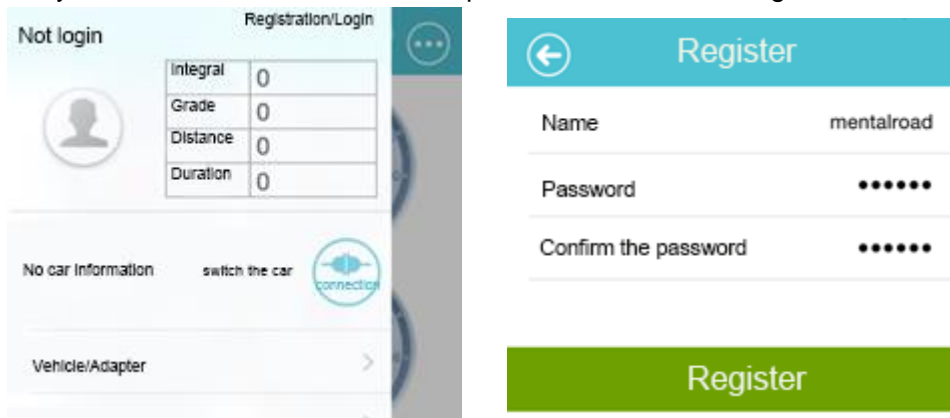
#### 1.)Install the adapter

Connect the equipment to the car's OBD diagnostic joint(usually lie on side of the left back plate or above the accelerate pedal),plug directing and tightly, in case falling off while driving.




#### 2)User registration

Only need to fill in the name and the password to finish the registration



#### 3).Complete the vehicle information

In order to offer you the high quality vehicle services, please use this product according to actual registered vehicle type or maybe cause cannot read the car's information correctly.

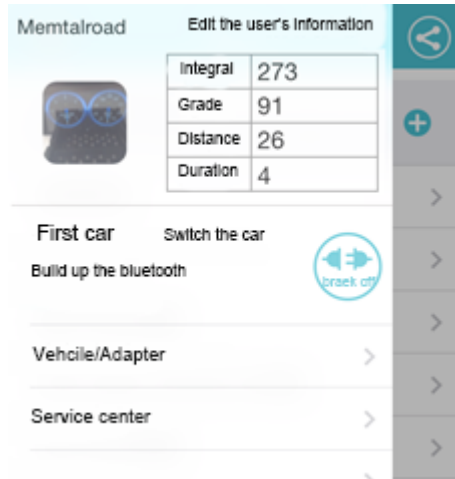
| Complete the vehicle information  |                       |
|---|-----------------------|
| Type  | FAW-volkswagen Bora > |
| Speed changing box:   | manual operation >    |
| Output volume (litre):  | 1.4                   |
| Fuel type:  | 92# >                 |
| Current fuel price:   | 7.65                  |
| Current distance:   | 950000                |

#### 4) Bind the adapter

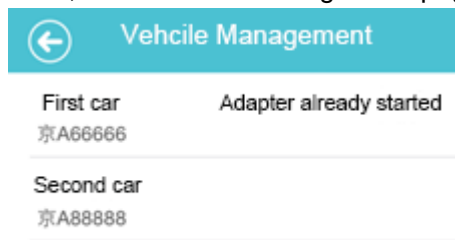
A. Open your blue tooth in the mobile phone



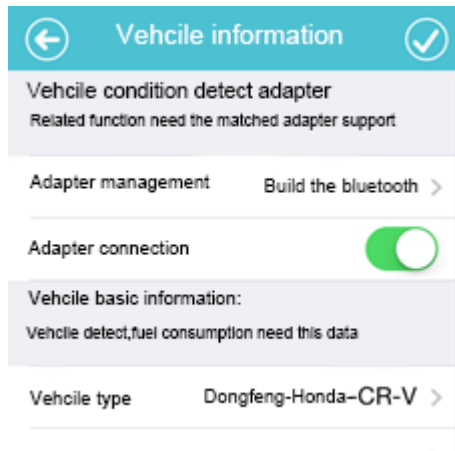
B. Click the “Menu” button on the top left corner to unfold the spread menu, choose the “vehicle/adapter” option.



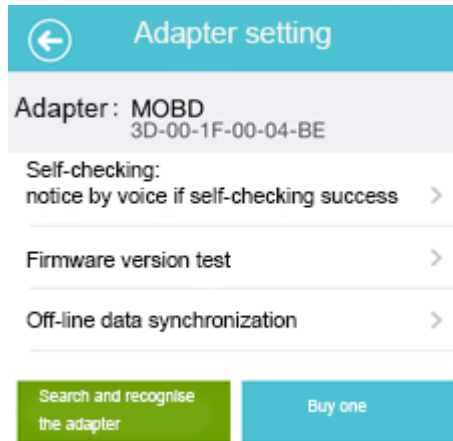
C. Choose the car in the car list, enter the car management page.



D. Choose "Adapter management" to enter the adapter management page.



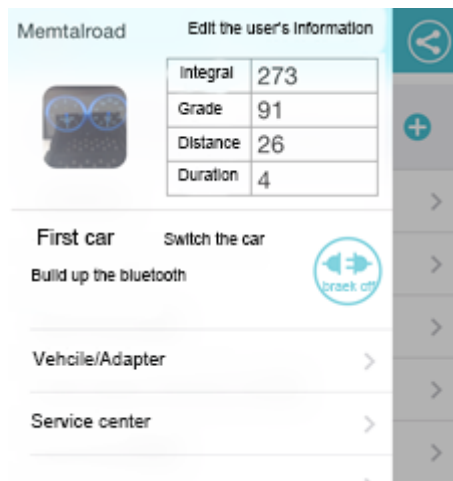
E. Click "Search and recognize adapter", choose "bind to the current vehicle" during the searched adapter list, done.



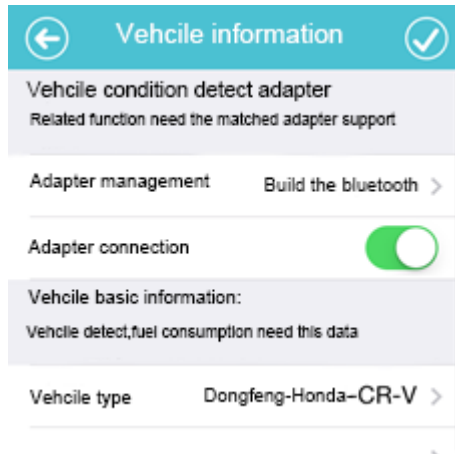
**5).Connect the adapter**

It can be connected in two ways between software and the adapter.

**A.** Unfold the spreads menu, choose the vehicle need to be connected by the “switch vehicle” button, click the “connect” button, the software can connect with the adapter automatically.



**B.** Unfold the spreads menu, enter” vehicle adapter”, choose the vehicle need to be connected, open the “adapter connect” button, the software connect with the adapter automatically.

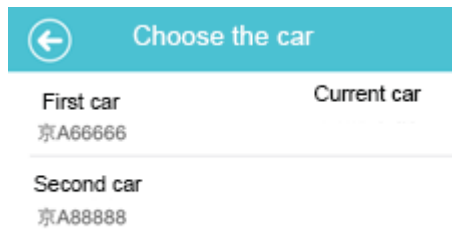


*Please open the mobile phone's blue-tooth when connect the vehicle, if there is no binding adapter, the software will search available adapter around. In order to connect the adapter quickly we suggest you do the adapter binding job before connect.*

### 6).Switch the vehicle

Support many cars, every car have its independent data.

You can enter different module by the “switch the car” button in the side slip menu to check the different car’s data.





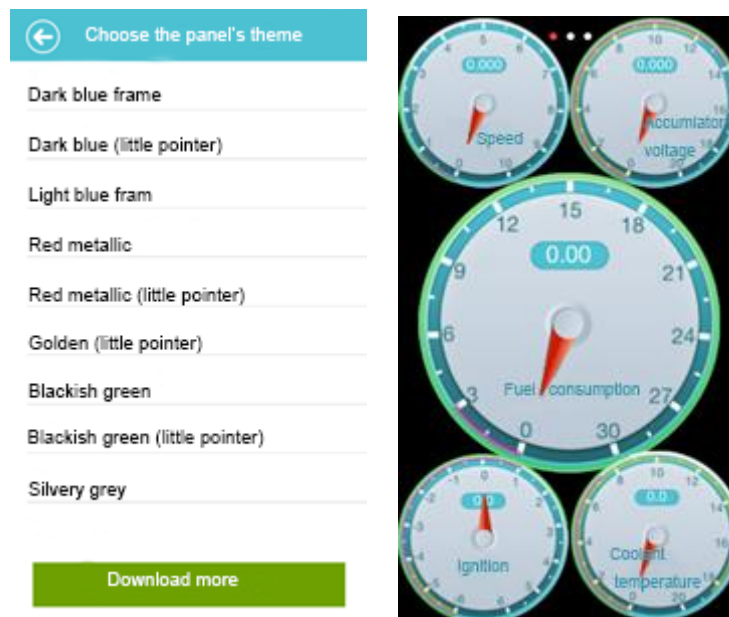
## 4. Instrument Panel

Show the current time data by instrument panel. Support instrument panel's theme switch, full screen and HUD mode, expand the instrument panel autonomously.



### 1).Theme switch

The “Menu” button on the top right corner--”change the instrument panel’s theme”, or by shake your phone, it can also change the theme.



### 2).Full screen and HUD mode

The instrument panel support full screen display, full screen is able to switch “HUD/reverse HUD”.

Touch anywhere in the instrument panel can change to full screen mode.

Under full screen mode, touch the left side or the right side to do the “HUD” switch.

Under the full screen mode, touch the middle of the instrument panel can get back to the normal mode.



### 3).Instrument panel switch

Change different instrument panel by dragging the screen to the left or the right



### 4)Add an instrument panel

Click the “Menu” button on the top right corner, select the “add an instrument panel”.

You can add an instrument panel by three ways:

**By internet download**, download the instrument panel design by other users.

**Unused template**, the unused template download by the user or the self designed template.

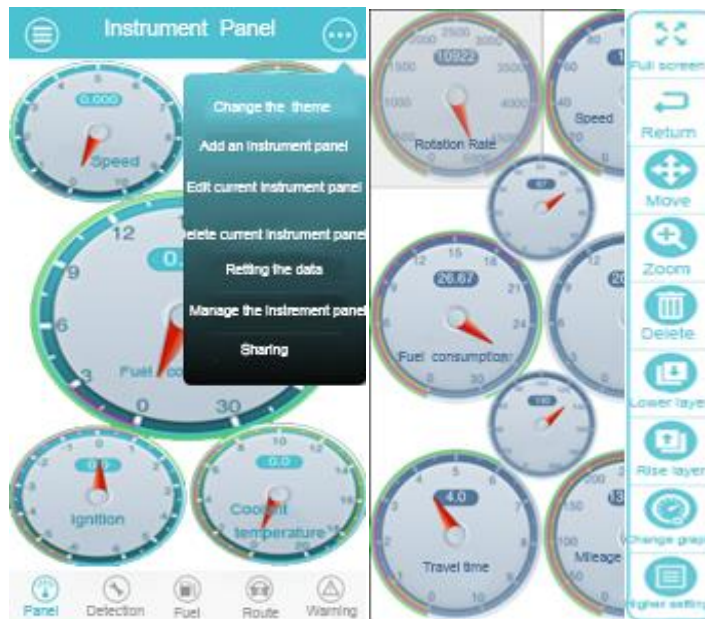
**New design**, new designed instrument panel.



### 5)Edit the instrument panel

You can edit the instrument panel by the following ways:

- A.Click the “Menu” button on the top right corner, select the “edit the current instrument panel” menu item.
- B.Click the “Menu” button on the top right corner, select the “add an instrument panel” menu item, and then select the “build a new one” menu item.



### Operating tool bar



"Fold/unfold" the tool bar by the top right corner button.



**Full screen:** enter to the full screen pattern

**Detail of the instrument panel:** shows the name, description and other things of the instrument panel.

**Adaptive of the screen:** adapt the resolution power according to the current screen.

**Add new instrument panel:** add a new instrument panel into the current instrument panel

**Select the instrument panel:** enter the instrument panel selecting mode, click the screen choose the instrument panel to do the editing work.

### Operating tool bar

The right tool bar is the instrument panel's operating tool bar when you choosing a instrument panel.



**Return:** get back to last step.

**Move:** click the instrument panel to enter the move mode, the you can change the instrument panel's location. What's more, it also support the following function :left shit, right shit, shift up, shift down, to the topside, to the bottom, to the most of the right or the left side.

**Zoom:** the instrument panel enter to the zoom mode after clicking, you can magnify and shrink it by your finger. What's more, it supports the zoom by equal ration, width zoom, height zoom, equal to the width and height.

**Delete:** delete the current instrument panel

**Lower the layer:** this tool can lower the layer back to the instrument panel when the layer shut out it.

**Rise the layer:** this tool can rise the layer up to the instrument panel when the layer shut out it.

**Change the graph:** circular instrument panel, half round one, dynamic one, stripe-like one, literal one.

**High grade configuration:** This tool can adjust the advanced properties of the instrument panel.

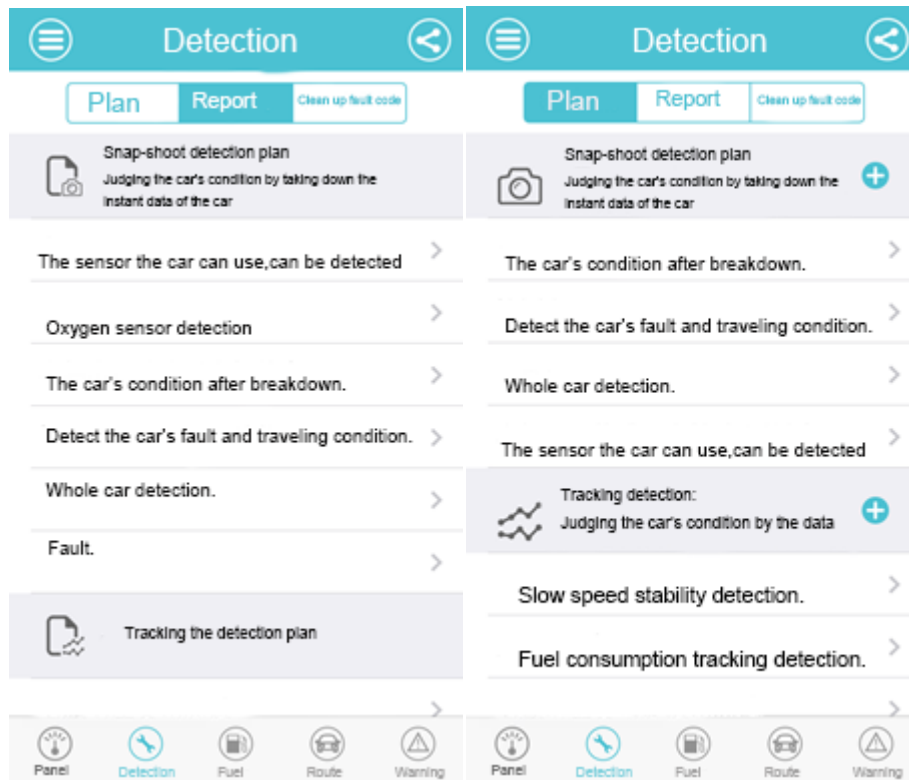
## 5.Detection

Provide the car detection service and the related service: detection plan, check for detection report, clear away the fault code.

The detection including the snap-shoot detection and the tracking detection.

**Snap-shoot detection:** Estimate the car's condition by taking down the instant data.

**Tracking detection:** Record the car's data constantly, judge the car's condition by the data changes.



Plan Report Clean up fault code

All fault codes will be cleaned up  
(please shut down the motor, leave the key at the "on" position)

Clean up the fault code

⚠ Don't clean up fault codes before setting the breakdown, suggest doing the detection at the repair point.

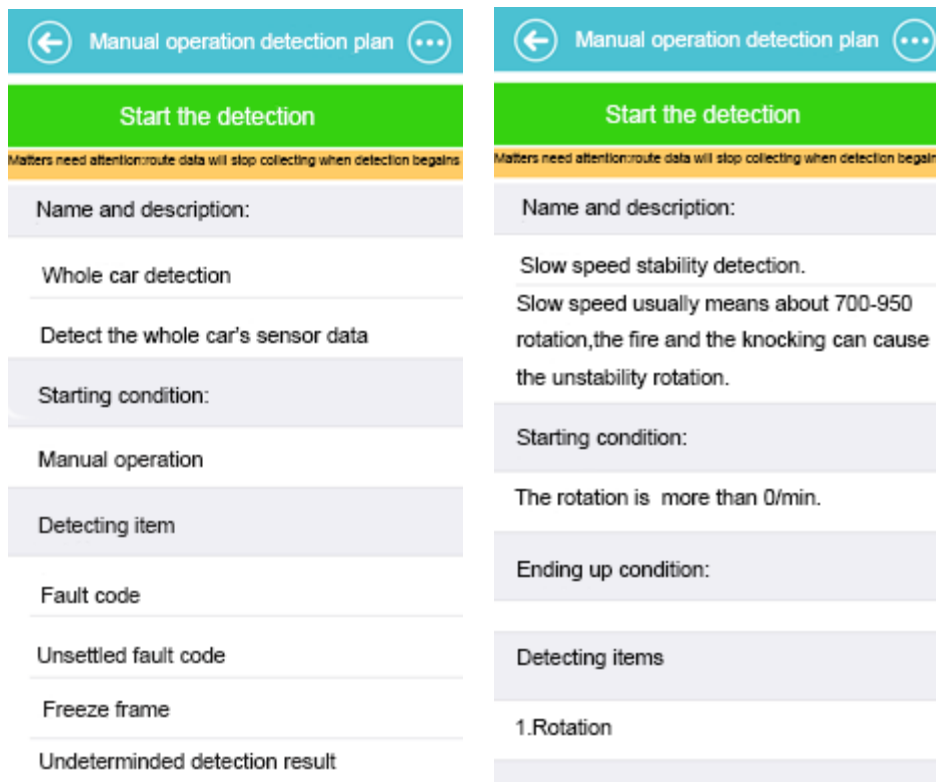
### 1)Execute the detection

Execute the detection including the automatic detection and manual operation.

**Automatic detection:** Do the detection job when meeting some condition: connection started, certain time after the connecting, cycling after connecting, having fault code after connecting.

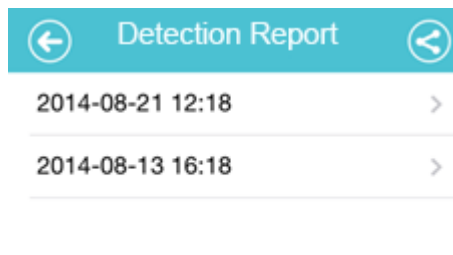
**Manual operation:** It needs to choose the detection plan--click the “start the detection” button, and then do the detection.

*The tracking detection needs a long time, it can affect the rout data reading, so only support the manual operation detection.*

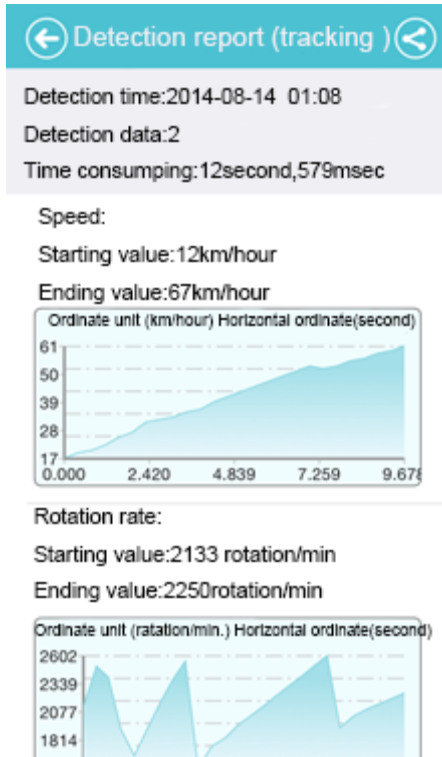


### 2)Detection report

Enter the “Detection report” by the “Detection report” on the top of the page or drag the screen to the left--choose the report you want to check--the report ranked by the detection date.







**Detection Report (snap-shoot)**

2014-08-08 16:08  
 Detect on item, all pass.  
 Your car is in good condition.

Car's control information:

The sensor can support:  
 The detection after clearing up the fault code: support  
 The freeze frame's fault code: support  
 The fuel system condition: support  
 Calculating load value: support  
 Coolant temperature: support  
 Short time fuel correction (cylinder 1 and 3): support  
 Long time fuel correction (cylinder 1 and 3): support  
 Short time fuel correction (cylinder 2 and 4): support  
 Long time fuel correction (cylinder 2 and 4): support  
 Calculating fuel pressure: support  
 Induction absolute pressure: support  
 Rotation rate: support  
 Speed: support

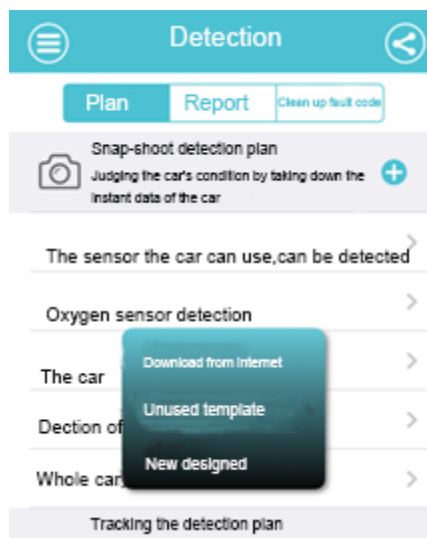
### 3) Add a detection plan

Click the button “+” on the left of the detection plan--you can add the plan by the three following ways:

**Download by the internet:** download the plan sharing by other user.

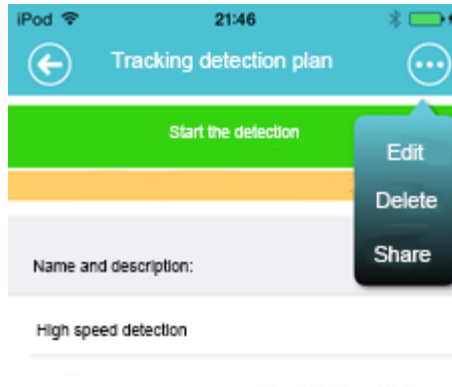
**The unused plan:** use the already download but unused plan or the self-designed plan.

**New design:** new instrument panel designed by yourself.



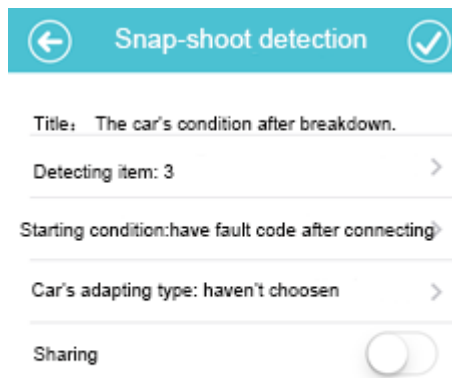
**4)Edit and delete the detection plan:**

Choose the plan need to be edited--enter the detection checking page--click the “Menu” button on the top right corner--choose the “edit/delete” button



**5)Design of snap-shoot detection plan**

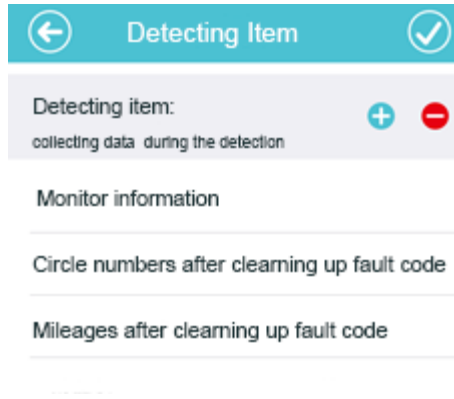
The basic of detection plan is judging the car’s condition by taking down the instant data of the car, so the design need to complete the setting of “detection data” and “starting condition”. Other user can download your plan if you sharing it.



**Add the detection data item**

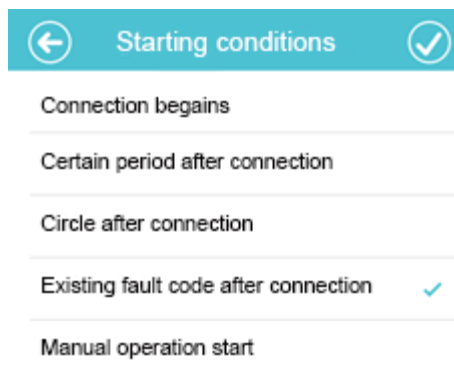
You can choose the car’s supervisory control data(the data produced by the car’s sensor and calculating),freeze frame(the snap-shoot when fault occurs),fault code, detection result by the oxygen sensor, specific detection result, unsettled fault code, car’s information.





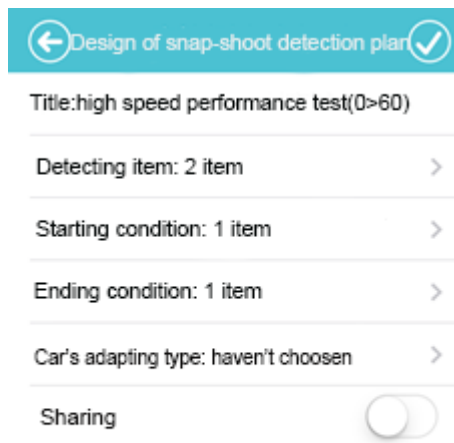
**Starting condition**

Choose the corresponding starting condition by detecting needs,the detection plan can record the data when satisfying the starting condition.



**6)Tracking the detection plan**

The tracking detection plan is constantly record the car’s data,judging the car’s condition by the data changes trend,this design need to complete the setting of “detection data item”,“detection starting condition” and the “detection ending condition”.



**Detection item**

You can choose the the data generating by many car sensors.The less detection items you

choose(one sensor data is read every 200milliseconds) the more accurate it would be.

← Choose the detecting item
✓

|                             |   |
|-----------------------------|---|
| Rotation                    | ✓ |
| Speed                       | ✓ |
| Induction absolute pressure |   |
| Fire time                   |   |
| Storage voltage             |   |

**The starting condition of detection**

- A.Set the relationship between many starting condition,"satisfy all conditions/satisfy any condition"
- B.Add the starting condition according to your needs
- C.Set the data item's condition and its data value.

| ← Trigger Condition ✓  | ← Condition Setting ✓                                    |
|--|--|
| Trigger condition:<br>form by many conditions <span style="float: right; color: blue;">+</span> <span style="float: right; color: red;">-</span> | Data item: rotation speed >                              |
| Time condition:<br>meet all conditions <span style="float: right; color: green;">🔴</span>  | Condition: more than that >                              |
| Car's speed:<br>more than 60km/hr >  | Data value 8191  |
|  | The value can change when using <input type="checkbox"/> |

**Detection ending condition**

After starting the detection, the tracking detection data will end up if satisfied the detection ending condition and a report will come out. If there have no detection ending condition you need to end up the detection by your hand and the generate the report.

- A.Set the relationship between many starting condition," satisfy all conditions/satisfy any condition"
- B.Add the starting condition according to your needs
- C. Set the data item's condition and its data value.

| ← Condition Setting ✓                                    | ← Trigger Condition ✓  |
|--|--|
| Data item: rotation speed >                              | Trigger condition:<br>form by many conditions <span style="float: right; color: blue;">+</span> <span style="float: right; color: red;">-</span> |
| Condition: more than that >                              | Time condition:<br>meet all conditions <span style="float: right; color: green;">🔴</span>  |
| Data value 8191  | Car's speed:<br>more than 1km/hr >   |
| The value can change when using <input type="checkbox"/> |  |

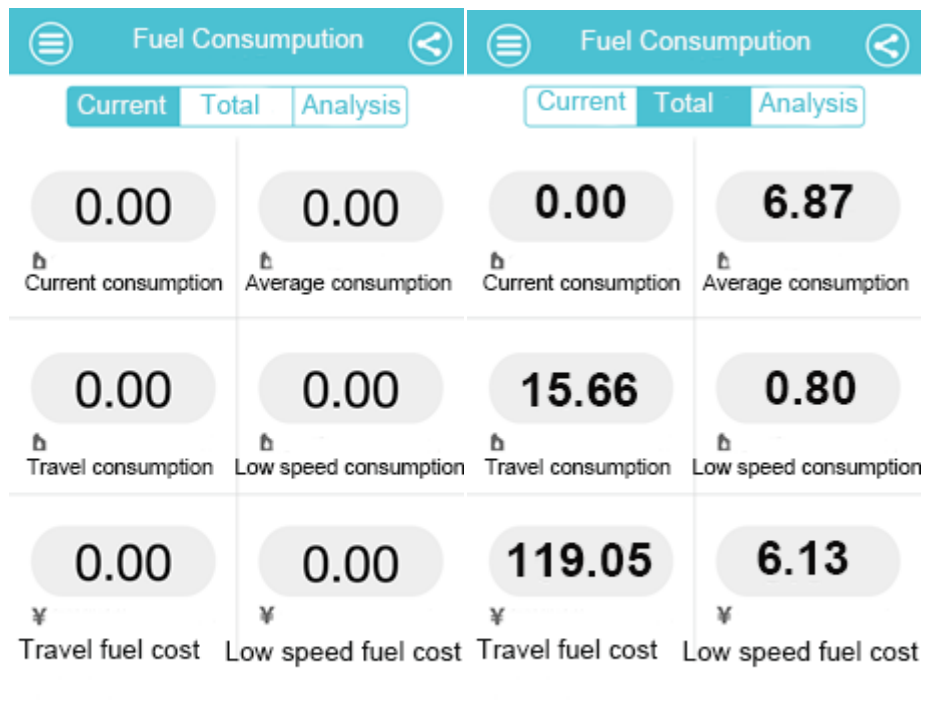
## 6. Fuel consumption

### 1) Current and accumulative fuel consumption panel

**Current fuel consumption:** it means the current fuel consumption data created when the software connect with the adapter

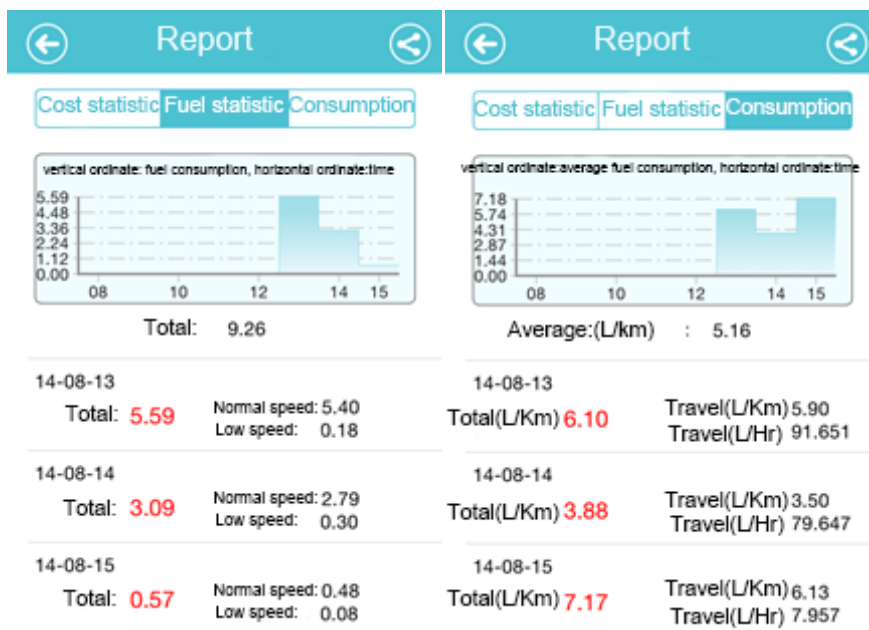
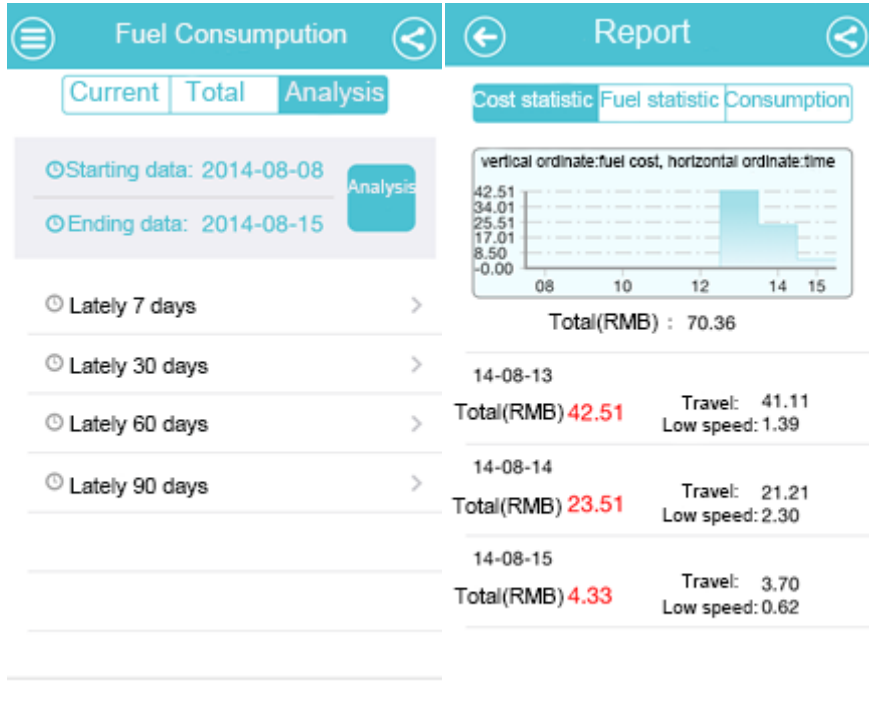
**Accumulative fuel consumption:** means the fuel consumption data from the software begin using to its end.

**Reset data:** The data can be re-record when you reset the data



## 2) Historical fuel consumption statistic

It can show the certain historical fuel consumption data in a specific time quantum, generate the fuel consumption statistic, fuel cost statistic.



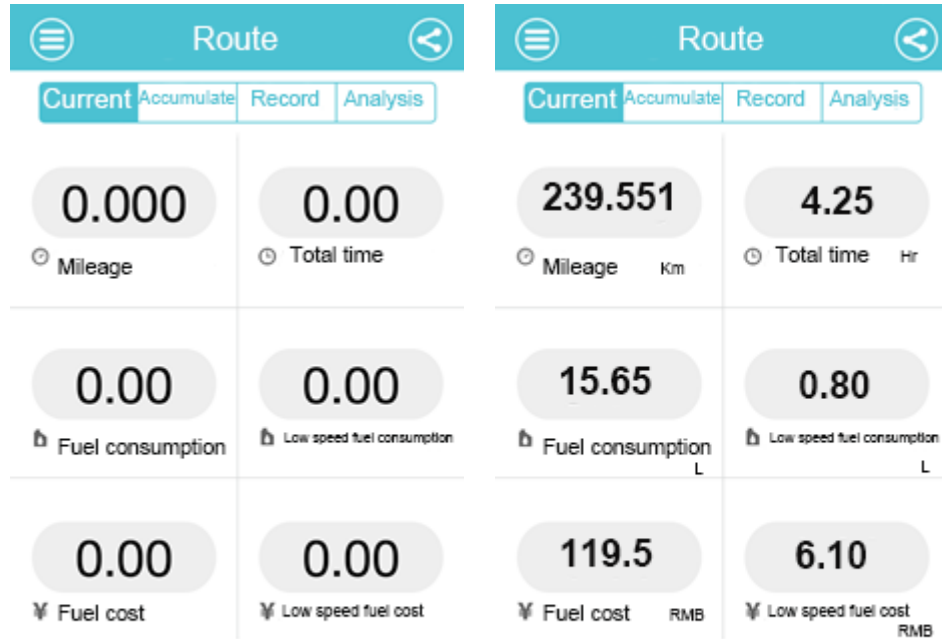
## 7.Route

### 1)Current and accumulative route panel

**Current route:** it means the current route data created when the software connect with the adapter

**Accumulative route:** means the route data from the software begin using to its end.

**Reset data:** The data can be re-record when you reset the data



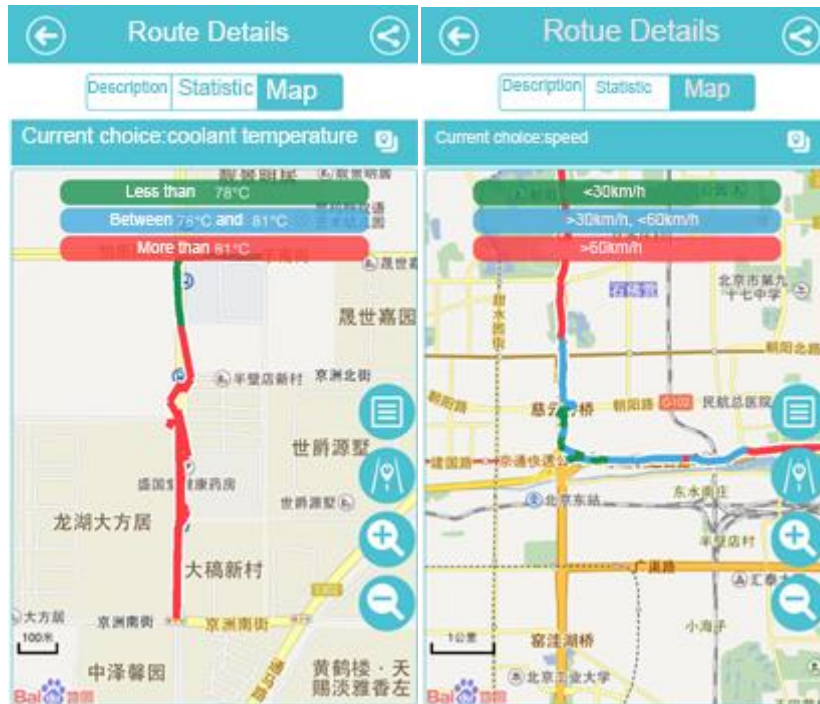
## 2)The record of the route

It can shows certain period of route data, you can also use the short cut key to check the route data. Choose one record then you can see the detail information of this route record.

| Route Time  | Duration     | Distance | Fuel Cost  | Consumption |
|-------------|--------------|----------|------------|-------------|
| 19:32~19:37 | 4min.52sec.  | 1.56 Km  | ¥ 0.86 RMB | 0.11 L /Km  |
| 18:53~19:07 | 13min.55sec. | 5.25 Km  | ¥ 2.60 RMB | 0.34 L /Km  |
| 12:41~12:46 | 4min.36sec.  | 1.14 Km  | ¥ 0.86 RMB | 0.11 L /Km  |

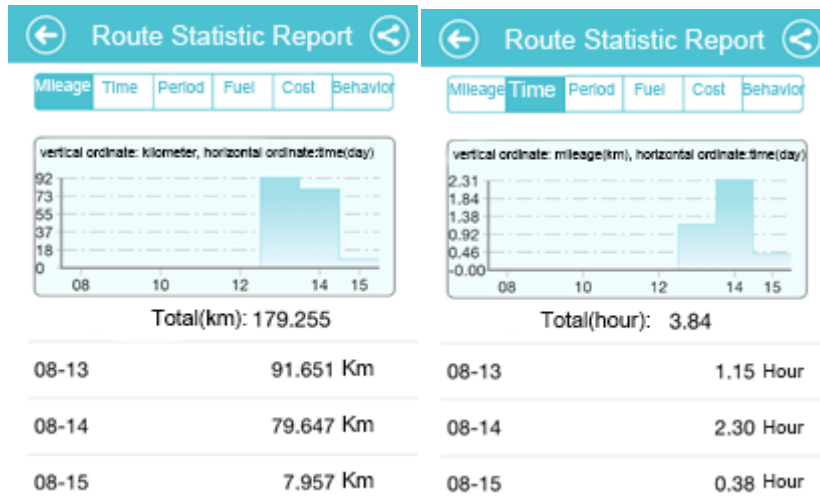
The detail of the route can switch from “describe of the route”, statistic of the route”, “route map” on the top of the page. The statistic of the route” and the “route map” can choose the statistic item.

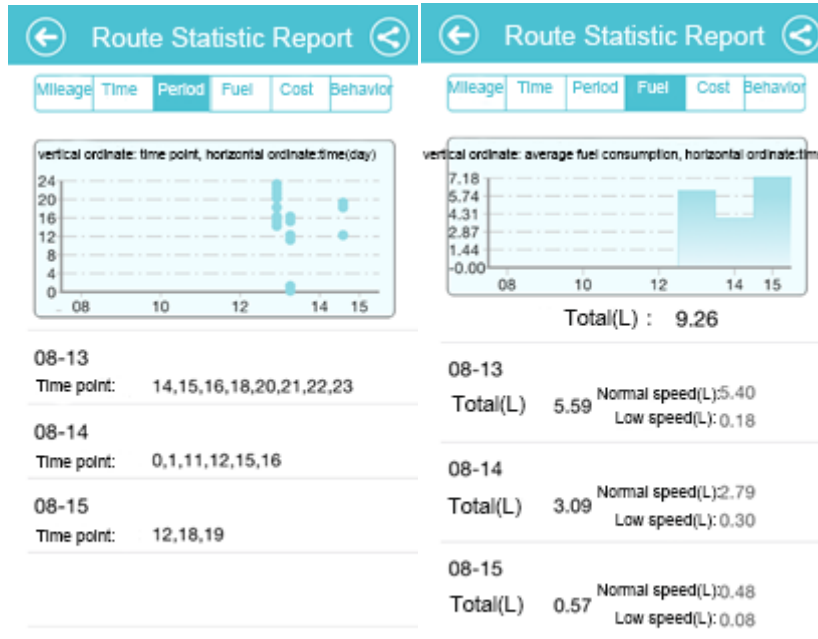
| Time     | Temperature |
|----------|-------------|
| 19:32:21 | 75°C        |
| 19:33:00 | 75°C        |
| 19:34:01 | 79°C        |
| 19:35:00 | 82°C        |
| 19:36:00 | 82°C        |
| 19:37:01 | 83°C        |



### 3)The statistics of the route

It can shows certain period of route data, you can also use the short cut key to check the route data, and create a route report. It including: mileage statistic, travel time statistic, travel period statistic, fuel consumption statistic, fuel cost statistic, driving behavior statistic.



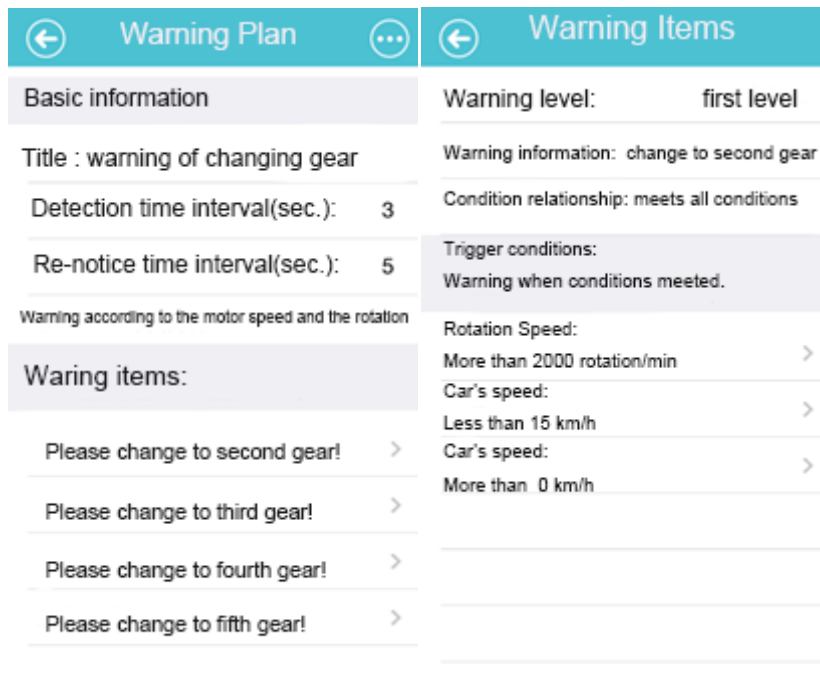


## 8. Early warning

It will give a alarm by character, warning tone, voice broadcast when satisfy the early warning conditions.

*You can set in the system settings whether open the warning tone and the voice broadcast or not.*





### 1)Add a early warning plan

Click the button “+”on the left of the early warning plan--you can add the plan by the three following ways:

**Download by the internet:** download the plan sharing by other user.

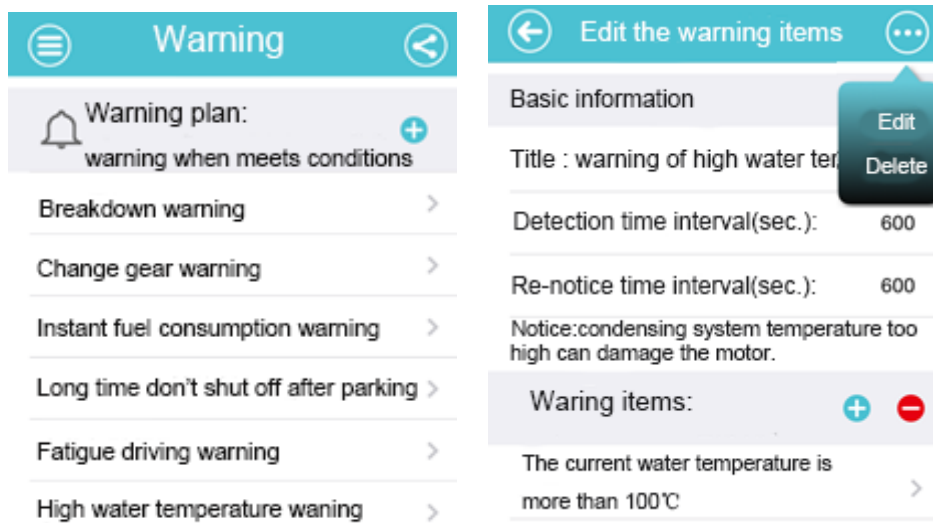
**The unused plan:** use the already download but unused plan or the self-designed plan.

**New design:** new instrument panel designed by yourself.



**4)Edit and delete the early warning plan:**

Choose the plan need to be edited--enter the early warning checking page--click the "Menu" button on the top right corner--choose the "edit/delete" button .

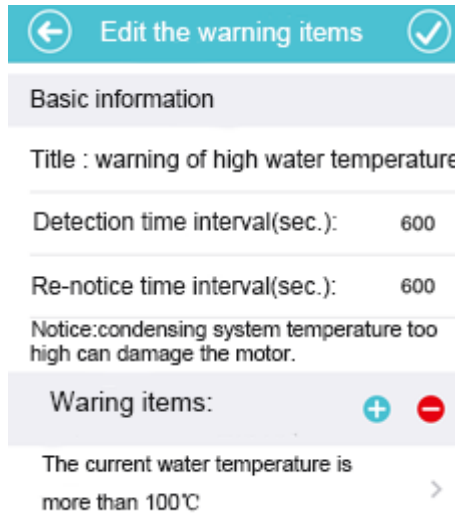


**3)Design of the early warning plan**

The basic information of the early warning plan:

Detect the time interval: detect whether the plan's trigger condition satisfy the time interval

The same warning time interval: the same trigger condition after the early warning.



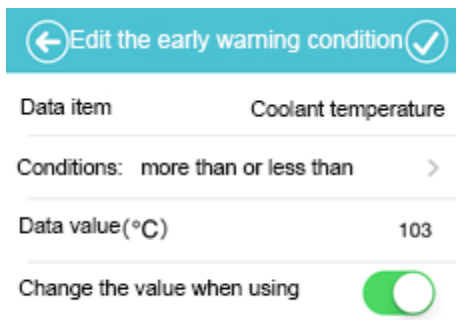
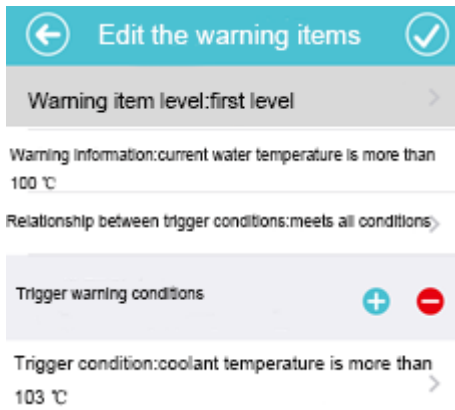
**Warning item**

**Warning type:** including tow level warning and tow level remind, second warning is the most serious level, and the first remind is the lowest level.

**Warning content:** The character showing and broadcasting when warning.

**Trigger conditions relationship:** When there has many trigger conditions, setting on trigger if every condition is satisfied or if only one condition satisfied.

**Trigger condition:** It can contain many trigger conditions, every trigger condition is formed by data item, condition and the data value.



**9.Setting up**

**Display**

Keep the screen always bright: when this function is open, the screen not locked beyond the automatic screen lock time.

Shake to change the theme of instrument panel: you can change the instrument panel's theme by shaking it when this function is open.

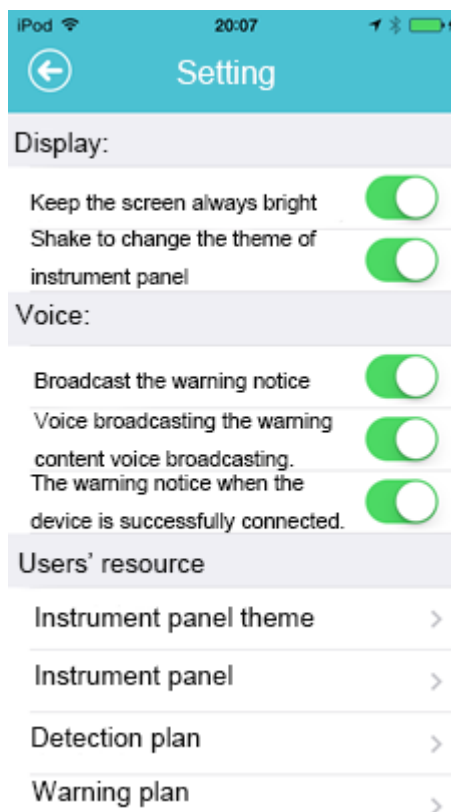
**Voice**

Broadcast the warning notice: open this function to broadcast the warning notice, this function will be closed when open the “voice broadcasting the warning content voice broadcasting” function.

The warning notice when the device is successfully connected: it will notice when the mobile phone's blue tooth successfully connect with the adapter and read the car's condition.

**Users' resource**

Including the current user's already used resource and the new design or unused resource. Divide into instrument panel theme, instrument panel, detection plan, warning plan.



**10.Road condition map**

Provide current road condition information.

Get the current position by “location button”

Control whether show the road condition or not by the “road condition switch”

Enlarge or reduce the map by “enlarge or reduce” button or by gesture.

