# OBD2 Connected Car System

# User Manual

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## Safety Precautions and Important information

1. Do not drive the vehicle and operate any part of hardware system. Any distraction may cause an accident.

2. Please follow the hardware installation guide for the gesture controller, so as not to be too far away from sensing or the wrong position may cause the gesture not smooth.

3. Please fix the hardware properly. If the driving is caused by improper installation, the user is responsible for it.

4. If the wiring is damaged, it is recommended to replace it with a new one before use.

5. Do not disassemble or modify the hardware by yourself. If the hardware is damaged due to improper disassembly, it is not covered by the warranty.

6. If the APP software cannot be installed successfully, please enter the settings to allow installation of applications from unknown sources.

7. This product is in accordance with Article 12 to 14 of the Measures for the Management of Low Power Radio Wave Radiate Motors.

8. The low-power RF motors that have passed the Type approval are not allowed to change the frequency, increase the power, or change the features and functions of the original design without permission.

9. The use of low-power RF motors must not affect flight safety and interfere with legal communications; if interference is found, it should be stopped immediately and improved to no interference before continued use.

10. The legal communication in the preceding paragraph refers to radio communication operating in accordance with the provisions of the telecommunications law. This low power RF motor must be subject to interference from legal communications or industrial, scientific and medical radio wave radiating electrical equipment.

11. The base of the gesture controller has a magnet. This product is not suitable for placing credit card, bank debit card, and magnetic stripe record data to avoid being demagnetized. People with heart rate regulators should use it 30 cm away from the heart. If you accidentally ingest the magnet base, consult a doctor as soon as possible. Also keep your phone and other hardware away from this item.

12. The position of the gesture controller should not affect the sight of the driver. The principle of driving safety is first.

13. Avoid exposing any vehicle accessories and wires to extreme temperature environments (above 70 °C or below -20 °C) as this will affect work performance and cause overheating of electronic equipment. Please also avoid contacting any accessories with liquid or rain.

# 1. Introduction

### Hardware Specification

| | 1. OBD2 Adapter | 2. I/O Signal Converter | 3. Gesture Control Unit |
|---|---|---|---|
| Model | V.Dialogue-BLE001 | - | - |
| Size (mm) | L46(L)x23.2(W)x31(H) | 120(L)x65(W)x25(H) | 25(L)x25(W)x40(H) |
| Weight (g) | 20 | 50 | 50 |
| Work Voltage | 8V ~ 18V | 8V ~ 18V | - |
| Work Current | 70 mA | 350 mA | 60 mA |

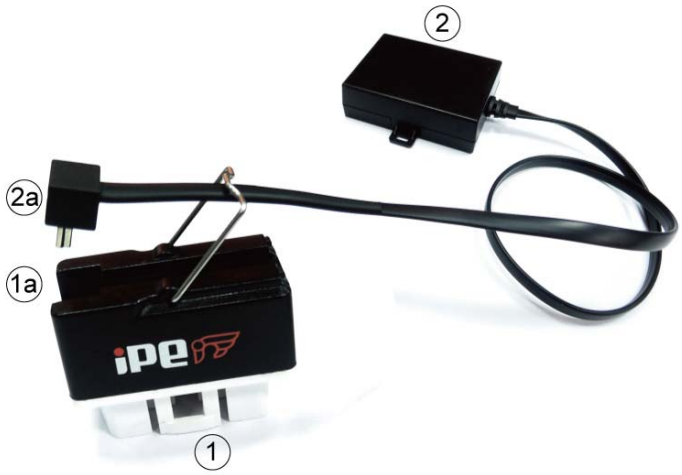
OBD2 System Overview

## 1. V.Dialogue-BLE

1.1 Find the OBD connector on the car, and connect the on-board communication device to the OBD plug on the car (refer to Annex 1).

## 2. I/O Signal Converter

2.1 Connect the USB cable on the analog signal box to the car communication ① mini USB interface (1a).



## 3. Gesture Control Unit

**Base**

3.1 Measure the distance during installation.

3.2 The upper part of the base should be placed horizontally.

3.3 Connect the USB cable (3a) of the gesture controller (3) to the socket (2b) of the analog signal box.

※ Remarks: Please install the above three hardware (1) vehicle communication device (2) analog signal converter (3) gesture controller all in order before installing the vehicle communication device (1) on the OBD plug of the vehicle. Do not install one by one.

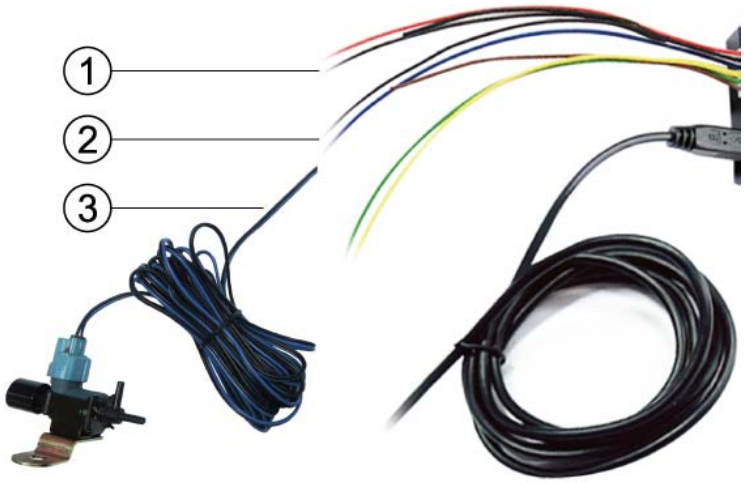
## 4. Connection and power cables-valve control

4.1 This cable is the valve power cable. Insert the white plug (4a) into the analog signal box (2c).

(1.) The red and black wires are connected to the power supply. The red wire needs to be connected to the front of a fuse with permanent positive current above 7.5A.

(2.)Blue black wire connection valve

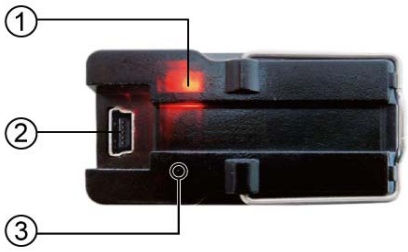
(3.)Valve




The following accessories 1. OBD plug on the car, here is the plug position of the communication device.

## 二、Hardware Installation Guide

### 2.1 Settings reset




2.1.1

The first time the OBD2 connector is installed, the red indicator light ① will flash. Please use a thin pin to press in the setting hole ③, wait until the red indicator light is always on, which means that the OBD2 has been connected and recognized the corresponding car. If the red indicator is still flashing, repeat this step and set it again.

2.1.2

When the OBD2 connector is installed on a different car, please reset the settings to make it reconnect to the car.

2.1.3

Please plug the USB end of the gesture controller into the ② socket on the OBD2 connector, and then you can use it.

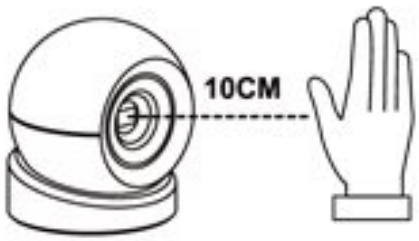
## 2.2 Gesture controller operation

### 2.2.1 Fixed gesture controller

Put this controller at a location that does not affect the sight of the driver.

The range of sensing of this gesture control is set within 10 cm.

Please fix the controller in a position that can be easily reached out for.




2.1.2

Rotate the base to adjust the angle of sensor and height of the ball. When the angle and position of the sensor are determined, the base is ready to be fixed on the car.

2.1.3

You need to wipe the base and the surface. Wipe away any oily residue, dust and dirt from the adhesive surface and keep it dry. After tearing off the adhesive tape and sticking to the surface of the object to be adhered, use the thumb to apply pressure back and forth to make it adhere to the surface tightly. Wait for 24 hours to fix the base.

## 三、How to Use Gesture Control

### 3.1 Definition of the four kinds of indicators

| Type | Red<br>(Outermost circle) | Green<br>(Outermost circle) | Blue<br>(Outermost circle) | Orange<br>(Inner circle) |
|---|---|---|---|---|
| Status | Valve control closed | Valve control open | Automatic mode<br>Closed | Automatic mode<br>Valve control open |

Valve control closed

Valve control open

Automatic mode
Closed

Automatic mode
Valve control open

3.1.1

This controller has a photo sensor that automatically adjusts the brightness according to the surrounding light during the day or night and adjust the brightness from the APP.

3.1.2

The system enters sleep mode one minute after the power is turned off. The light also goes out after one minute.

3.2

Gesture control is activated in the previous preset mode. During operation, place your hand on the front of the gesture sensor within 10 cm for a response time of 0.5 seconds. The green light indicates that the valve control is turned on.

3.2.1

After hearing a short beep, move your hand away from the sensor to enter the valve closing mode (the indicator light is red).

3.2.2

When the hand is placed in front of the sensor again for 0.5 seconds, after hearing a short beep, remove the hand from the sensor, and then switch back to the valve control Auto (the indicator light is blue).

3.2.3

In automatic mode (blue indicator light), the valve control enters the innermost circle (orange indicator light is on), indicating that the valve is open.

3.2.4

When the automatic mode valve is open (the blue light on the outer circle and the orange light on the inner circle are on at the same time), keep your hand for more than 0.5 seconds in front of the sensor. You hear a beep and the valve closes and the orange light goes out.

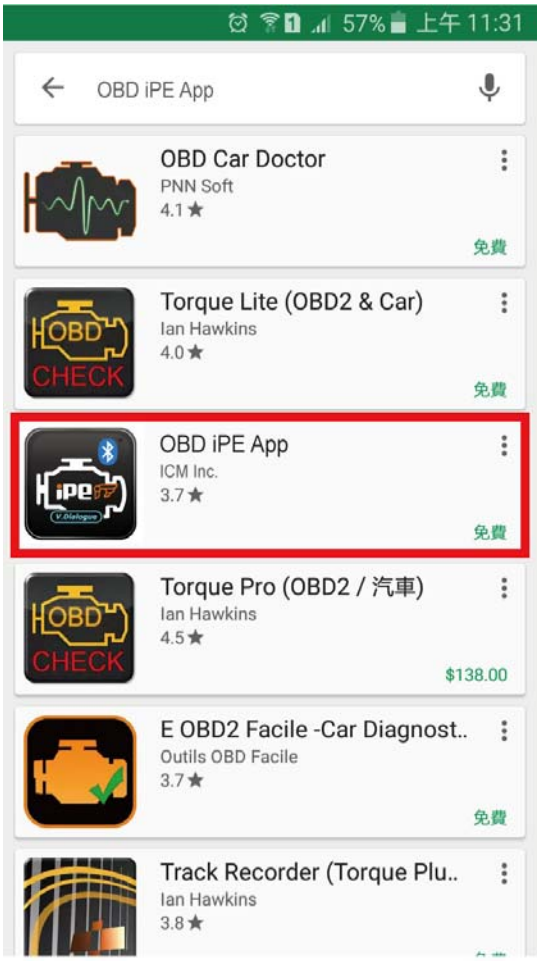
3.2.5

The gesture control light will continue to switch between blue-> green-> red.

## 四、Software Installation

4.1

First, download the Android APP from the Google Play Store. For Apple series phones or tablets, please go to App Store. Search for OBD iPE App as shown below



4.1.2 Click to enter the APP to download.

4.1.3 After downloading, click unzip to install the software.

4.2

Bluetooth pairing

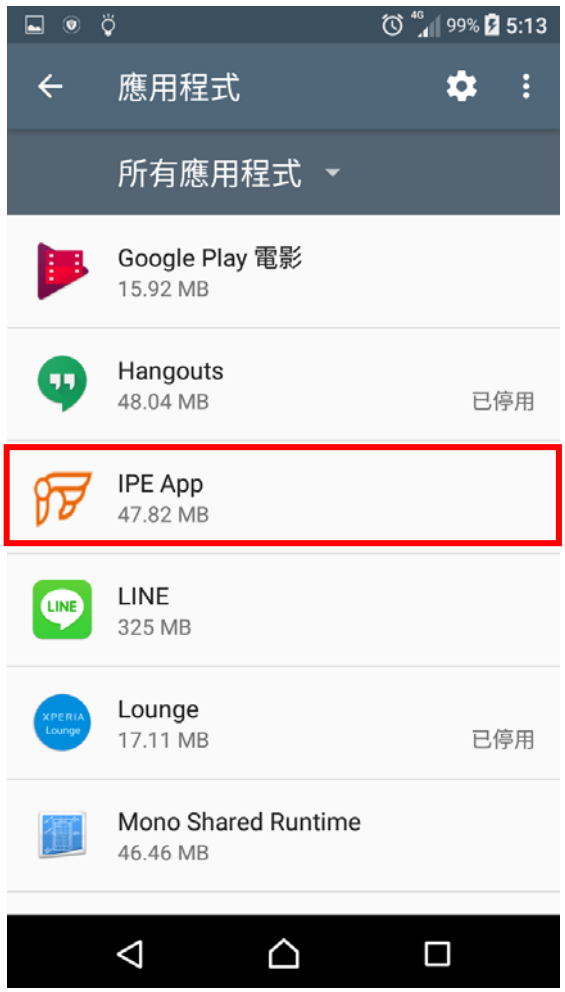
Turn on the Bluetooth device on your mobile phone or tablet and search for the ID name “V.Dialogue_BLE_xxxxxx” for the first time.

After the pairing is successful, it will automatically connect later on.

## 五、To Remove Software

5.1 Go to the "Settings" option and click on "Apps".

## 5.2 Click on the IPE App

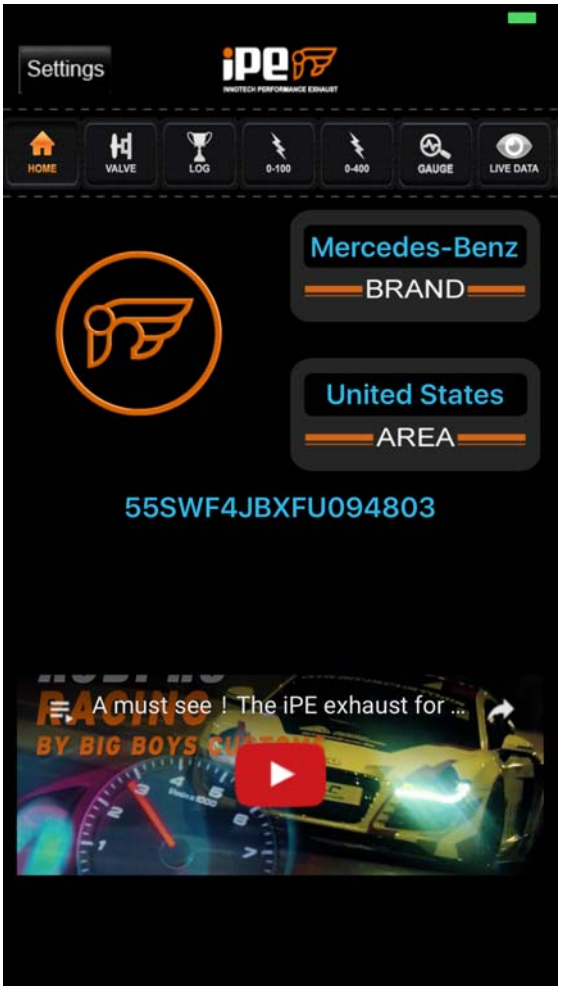


5.3 Click "Uninstall"

## 六、APP Features

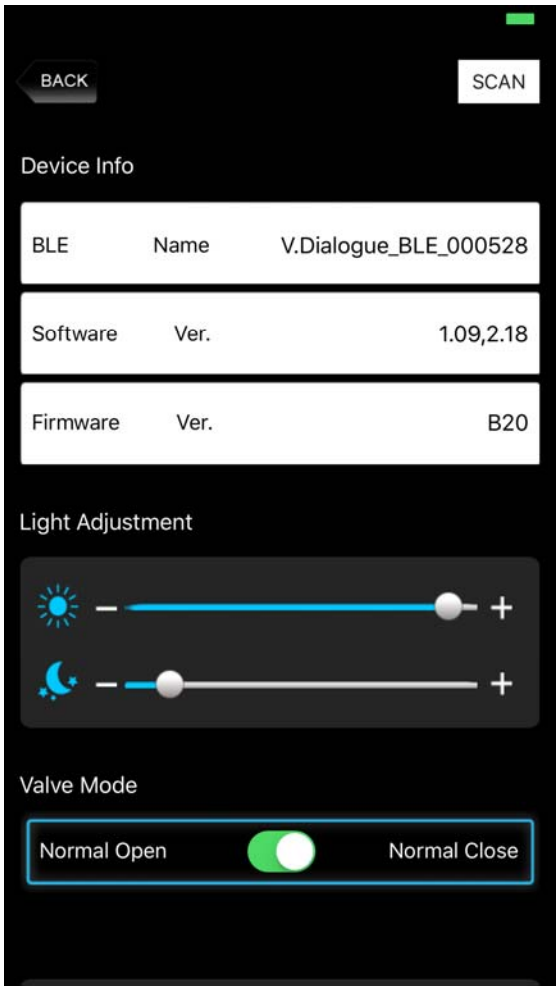
### 6-A　HOME

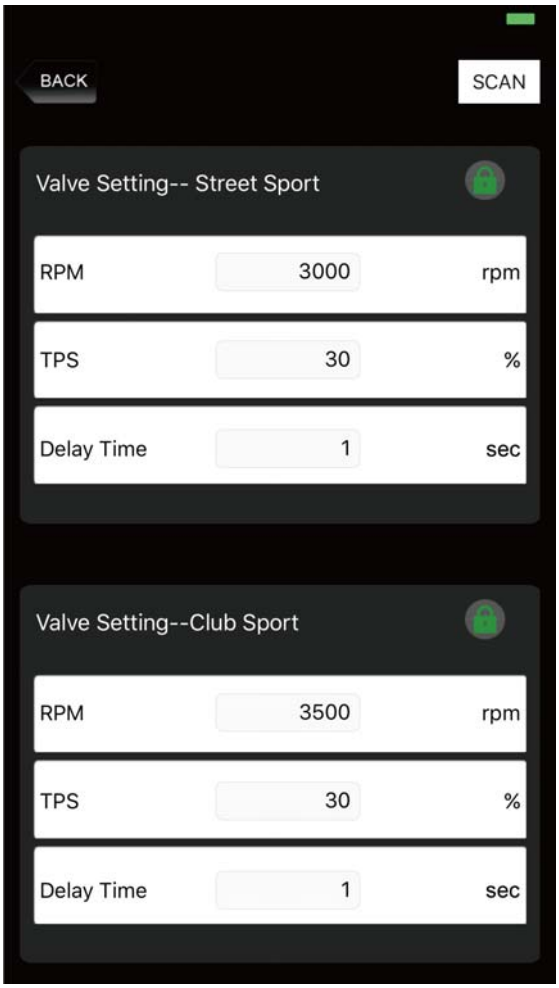
The car brand and origin are displayed, and the English and numeric strings below are body codes.



## 6-B SETTINGS

- After the phone is connected, the hardware pairing ID, software version, and firmware version appear.
- Adjust the light intensity of the gesture controller during the day and night.
- Valve control can be set to normally open or normally closed.
- There are 3 setting modes for valve control: different preferences are set on RPM / TPS / Delay Time.



## 6-C　LOG

Time elapsed in seconds from 0 to 100 kilometers (KM / H).

Time elapsed in seconds from 0 to 400 meters (M).

Cumulative fuel consumption is displayed.

6-C1　Seconds for kilometers (0-100)

Click START. Once the car starts accelerating, the meter will start running.

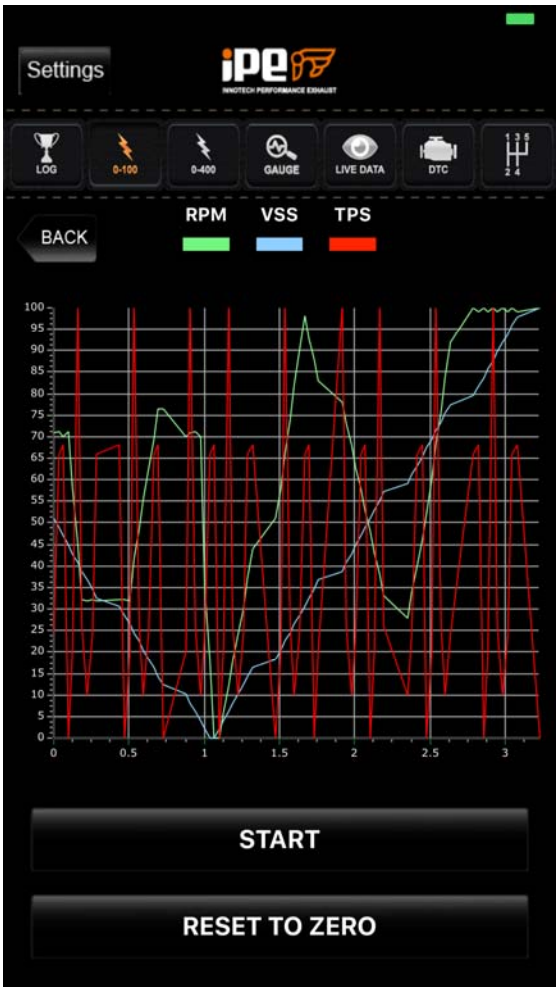
The following example is the seconds spent at a speed of 0-100 KM / H.

## 6-C2 Seconds for Meters (0-400)

## 6-C3 VIEW CHART

Performance chart showing three performances of RPM / VSS / TPS in the record.

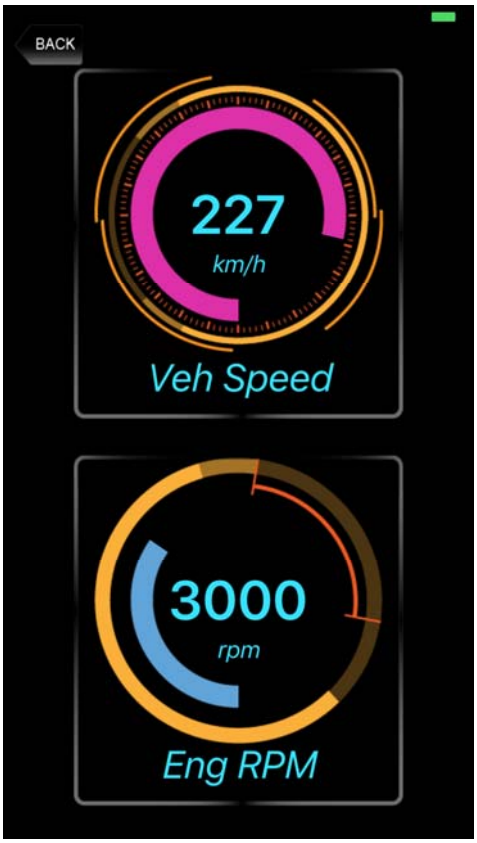
Click RESET TO ZERO to clear the graph. Click START again to restart the performance chart.

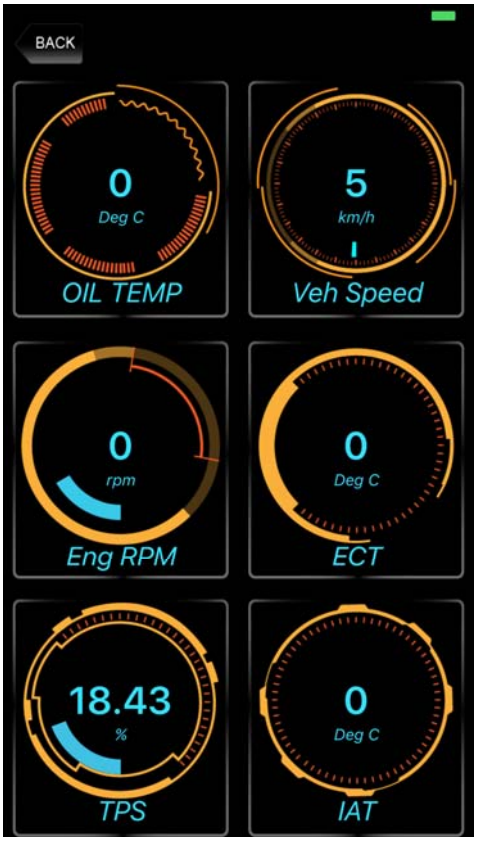


## 6-D GAUGE

On the menu, click (2 or 4 or 6) to monitor the function. After clicking, press (SEND) to display the value.

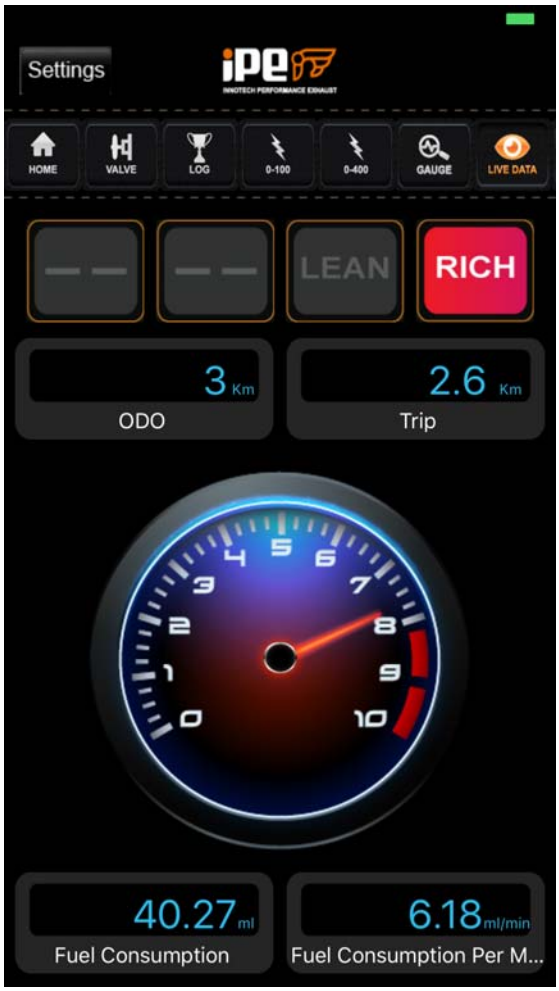
## 6-D1 GAUGE (Live Data monitoring) display

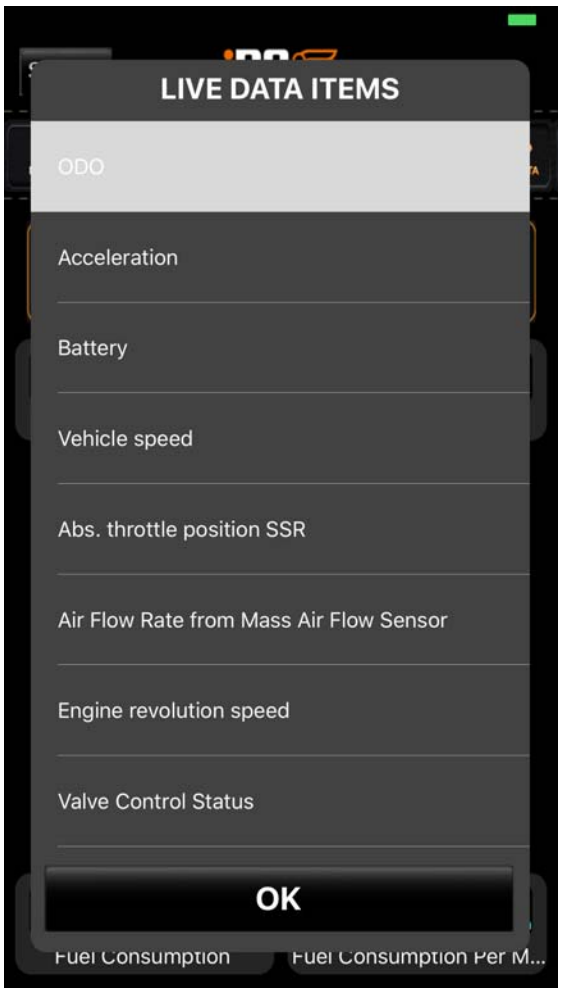




## 6-E Live Data

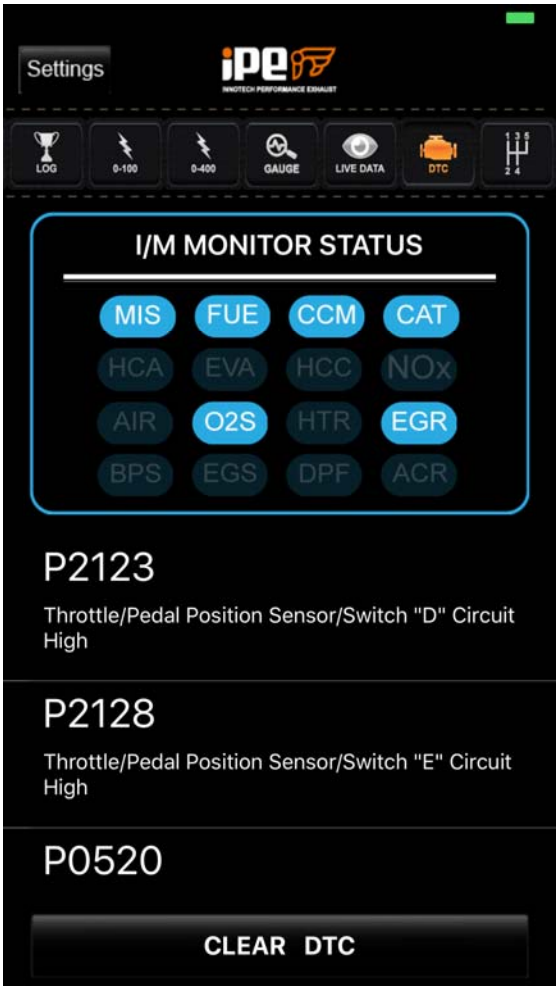
- The LIVE DATA page displays the current Live Data of the car, such as engine RPM, vehicle speed, TPS, etc ...
- If the light of items is not on, it means that there is no item that has been activated.
- The LEAN or RICH lamp lights up to indicate the state of fuel injection.
- There are 4 grids of function in the Live Data main menu. After clicking in, you can switch from the Live Data Items menu to select the display value of other items.




LIVE DATA ITEMS
ODO
Acceleration
Battery
Vehicle speed
Abs. throttle position SSR
Air Flow Rate from Mass Air Flow Sensor
Engine revolution speed
Valve Control Status
OK
Fuel Consumption
Fuel Consumption Per M...

6-F　DTC

This function can read the car's DTC and display the fault description. Click CLEAR DTC to eliminate the DTC.

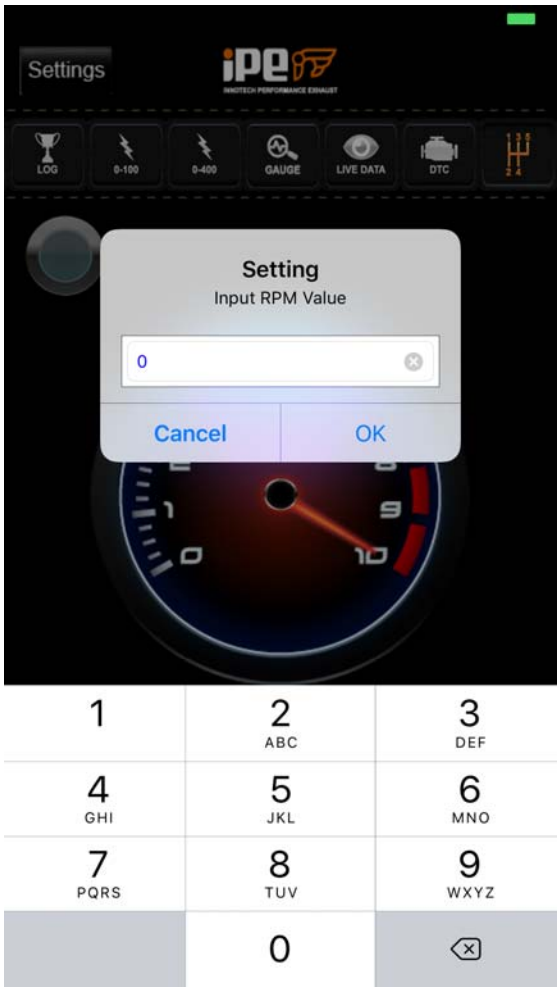


## 6-G SHIFT

When the speed reaches a certain speed, the shift indicator lights up.

In Setting Shift, you can set at how many speeds that you should change the gear.

This example is to set the RPM speed. Click OK to confirm the setting.

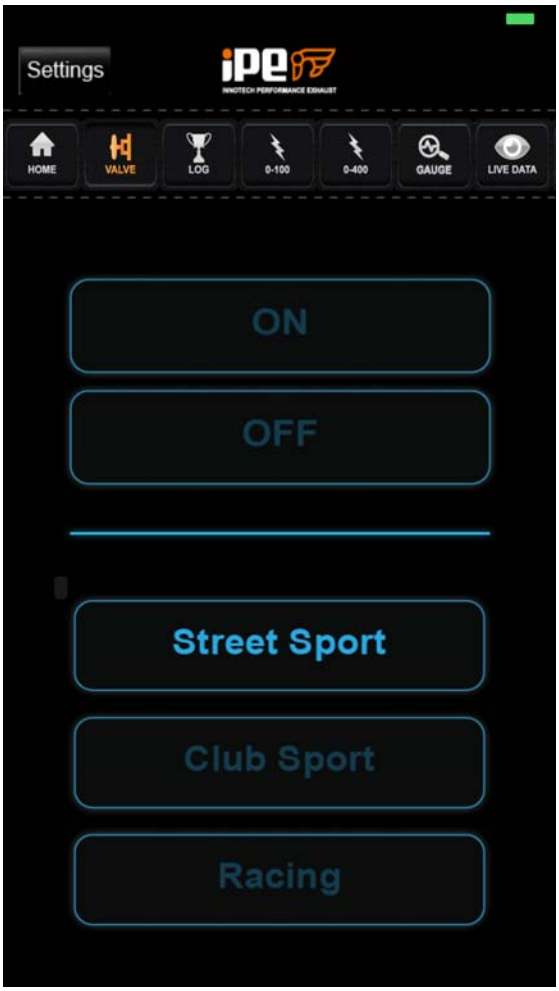


## 6-H VALVE

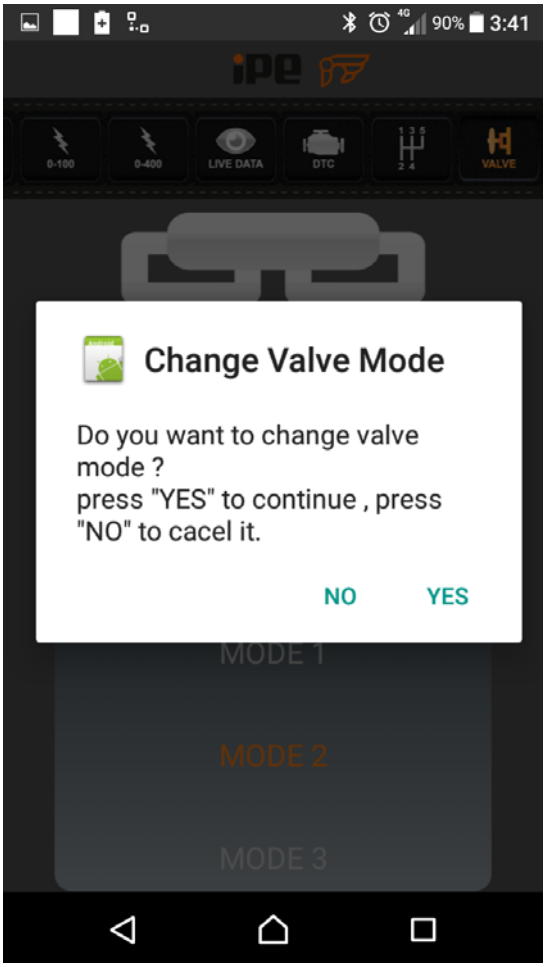
The valve can be set to be open (ON) and closed (OFF).

There are three options in auto mode: Street Sport, Club Sport, Racing.

The choice of valve control and gesture control on the App corresponds to each other.



After clicking the mode you want, the screen will ask if you want to change the mode. Click YES to confirm the change.




※ If the APP is not in use, you can turn it off and turn off the Bluetooth switch on the phone. The communication device will automatically sleep 1 minute after the car goes out and will automatically wake up when the car starts.

## 七、Trouble Shooting

(1)

What should I do when entering the main screen of app and find the model and body code are not the one shown on the car in use?

On the communication device, press and reset with a fine pin for 3 seconds. After hearing the beep, it will automatically learn and re-detect the vehicle name.

(2)

The BLE initiation problem occurs when the mobile APP is started. Will it stay on the screen for a long time?

If this happens, please close and re-open the APP, and then you can use the Bluetooth connection again.

(3)

How to remove the communication device?

Hook the iron ring on the object for easy removal from the OBD2 plug.

## 八、Software Update

(1)

Please go to the software download area of ICM website and download the new APP version directly.