

## Car Smart Gauge P24

(This product has registered multinational appearance patents and display screen copyrights)

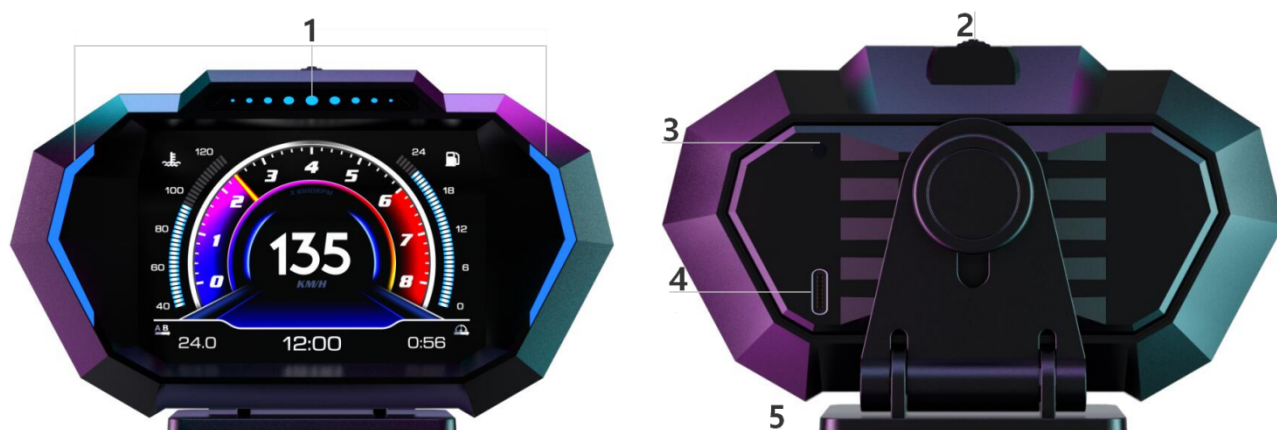
### Attention!

Product working voltage: 11V~18Vdc(12Vdc/200mA)

12 kinds of language (1, English 2, Simplified Chinese 3, Traditional Chinese 4, Thai 5, Japanese 6, Korean 7, Russian 8, Arabic 9, Malaysian 10, Spanish 11, German 12, French)

For first time of use, please choose the language, and then choose OBD2 system or GPS system. (Pull the setting button left or right to switch the language/systems, push in the button to confirm the choice. If no operation for 5 seconds, it will enter into the last selected system)

### Product photo and explanation:



1. RGB Ambient Light: Change with engine speed or vehicle speed (also can manual change the color in menu setting)



2. Setting button/Wave button

Short press in the button for 1s: (1)switch the display mode (2)confirm the option in menu setting

Long press in the button for 2s: (1)enter into the menu setting (2)save the setting and exit

Short press left: (1)switch the functions on the left of the screens (2)in the inclinometer screen, to do the calibration

Long press left: switch the RGB ambient light or turn it off

Short press right: (1)switch the functions on the right of the screens (2)change the option in menu setting

Long press right: switch the RGB ambient light or turn it off

3. Light sensor: it will auto change the brightness
4. OBD2 input
5. Suction holder

### How to turn off the RGB ambient lights?

Long press left(or right) the button for 2s,to switch the color,and toggle multiple times until the ambient light was turned off

### Inclinometer Calibration

First,switch the display to inclinometer screen,and put the device well,short press left the button, it will give the sound of 'di di',means finished the calibration.

### Time calibration

If the clock is not correct,please long press in the setting button to enter into the menu setting,and find system time calibration option,short press in the button to check the time,and short press left/right to change the time,once finished,longt press in the button to save and exit.

### Abbreviations explanation for different functions

<b>ECT</b> = Engine coolant temperature	<b>VLT</b> = Voltage	<b>FUE</b> = Fuel consumption
<b>RPM</b> = Rotation per mile	<b>TIM</b> = Time/Clock	<b>MIN</b> = Driving minutes
<b>DIS</b> = Single Driving distance	<b>MAP</b> = Manifold air pressure	<b>OIT</b> = Oil temperature
<b>A/F</b> = Air-fuel ratio	<b>TCP</b> = Turbo pressure	<b>PSI</b> = Turbo pressure unit
<b>RTC</b> = Satellite time	<b>ASL</b> = Altitude	<b>DIR</b> = Driving direction
<b>TPS</b> = Throttle position	<b>KM/L</b> = Kilometers per liter	<b>IAT</b> = Intake air temperature
<b>CVT</b> =Continuous variable transmission	<b>ELD</b> = Engine load	<b>GPS</b> = Satellite numbers
<b>ODO</b> =total driving distance	<b>AVG</b> =Average fuel consumption	

### Display icon explanation



Voltage



Fuel  
consumptipn



Total driving  
distance



Trip distance



coolant  
temperature



















Average fuel  
consumption




Oil pressure



Trip time

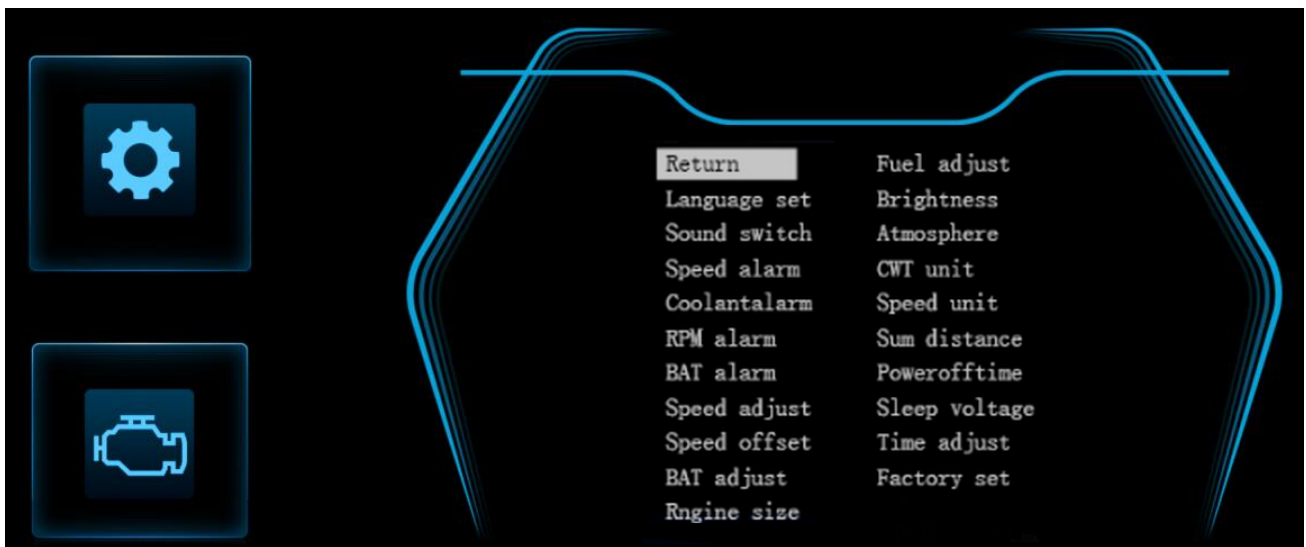
	Oil temperature		Engine load		Intake air temperature		RPM
	Continuous variable transmission		Intake air temperature		Altitude		Air-fuel ratio
	Turbo pressure		Total driving distance		Clock		Driving direction
	Manifold air pressure		GPS signal		Throttle position		Kilometers per liter

## Menu setting:

**Step 1**, Long press in the setting button, and will see the  setting icon, then short press in the button to enter into the menu.

**Step 2**, Short press right to switch the option, short press in to choose the option, short press left or right to change the value, short press in to exit this option.

**Step 3**, After finish the menu setting, long press in the button to save and back to display screen.



**Language Set:** Simplified Chinese/ Traditional Chinese/ English/Japanese/Korean/Thai/Russian/Arabic/Malay/Spanish/German/French

**Sound Switch:** **ON**=Turn on the alarm, **OFF**=Turn off the alarm

**Speed Alarm:** Alarm when the vehicle speed >150, adjust range is 5-200

**Coolant Alarm:** Alarm when the water temperature >120, adjust range is 50-200

**RPM Alarm:** Alarm when the engine speed >6000r/min, adjust range is 1000-8000

**BAT alarm:** Alarm when the voltage <10.5v, the setting range is 10.0-15.0v

**Speed Adjust:** If the speed is not correct, please change this default value. (e.g. instrument display 100 Km/h HUD shows 105Km/h, set the value to 107-5=102)

**Speed Offset:** When the vehicle speed does not return to 0 after the car is turned off (E.g. speed display 5Km/h, please adjust HUD to 6Km/h)

**BAT Adjust:** If voltage is wrong, can change this value (If the hud displays 0.2V higher than the instrument voltage, the device is adjusted to 98%)

**Engine Size:** When the fuel consumption error is large, adjust according to the displacement (If the car displacement is 3.6L, adjust the parameter value to 3.6L)

**Fuel Adjust:** If the fuel consumption is not correct, change this value. (eg. the device displays 0.2L higher than the instrument voltage, adjust the value to 98%)

**Brightness:** Auto= Automatic light sensitivity, 1= The darkest, 8 =The brightest

**Atmosphere:**

**RPM** = The RGB lights color will change according to the RPM

**SPEED**= The RGB lights color will change according to the speed

**OFF**= Turn off the RGB light

**BLUE**= Blue RGB light

**RED**= Red RGB light

**PURPLE**=Purple RGB light

**CWT Unit:** °C =Celsius °F =Fahrenheit

**Speed Unit :** Km/h= Kilometers MPH= Miles

**Sum Distance:** total mileage synchronization (Keep it as same as dashboard, ex: odometer shows 30010km, adjust the parameter value to 30010km)

**Power Off Time:** The default is 10 seconds to shut down, the adjustment range is 5-300 seconds

**Sleep Voltage:** If the device can not auto turn off, adjust to 13.2V or 13.6V . For Automatic start-stop system cars or Hybrid cars, adjust to COM mode.

**Factory Set:** The system restores to the factory preset values. After selecting this operation, short press in to confirm or long press in to exit.

**Time Adjust:** It can be adjusted to local time, the default time is China time (GMT+8)

## Performance Testing

**Acceleration test:** 100km acceleration refers to the acceleration time from 0 to 100km/h, which is a power test of the car

**Brake test:** The time and distance used after the brake is stopped completely when the vehicle speed exceeds 100km/h is the performance test of the brake

## OBD2 Diagnostic

**Scan fault code:** Scan whether there is a error code

**Clear fault code:** When the car has a error code display, short press in to clear it

**Read data stream:** Display all data in the car engine

## OBD2 system FAQ:

### 1.The screen without any display, and no power

Check whether the OBD cable is tight connection, pull down repeatedly to confirm, please try it on another car if still not workable, analysis if it is a cause from OBD diagnostic interface, if yes, please repair it and connect the device again.

## **2.Only the car voltage displays and be automatic power off after 30 second**

- (1) This product is only available for OBDII and EOBD cars when it is in OBD2 mode.
- (2) Year of car production (Suitable for cars produced after 2008).
- (3)This product OBD2 mode does not support OBD I and JOBD.
- (4) Switch to the GPS system using the USB cable to display, within 5 seconds of power press right to select the GPS system.

## **3.There is an error between the vehicle speed and the dashboard display**

Please check whether the unit is correct. Kilometer KM/mile MPH (reference setting item for speed unit switching)

The speed unit is correct when the power is turned on: long press in to enter the setting, press right to select the speed error adjustment for fine-tuning (e.g. instrument display 100 Km/h HUD shows 105Km/h, use default value 107-5=102)

## **4. There is an error in fuel consumption**

- (1) Checking your car displacement and make sure that the engine displacement of the device is as same as your car's(e.g. car is 2.0L,please set parameter value to 2.0L)
- (2) if the displacement is the same, you can also do a fine-tuning settings(e.g. equipment fuel is higher than 0.2L,please set the parameter to 98%)

Recommended: fine-tuning is optional since it is a real data from car computer

## **5.This HUD cannot auto shut down**

After the car engine stops,the RPM on the HUD can not be turned off,please set voltage to 13.2V or 13.6V,so that the car can be turn off after 3 minutes.

## **6. Step on the brakes and wait for the traffic light to turn off the machine and automatically start and stop the car.**

Adjust the shutdown voltage setting in the system settings to COM mode

## **7. Automatic start-up will auto off when step the brake and same situation on Hybrid car in the traffic.**

- (1) Setting to COM mode(in the menu of shutdown voltage)
- (2) Setting shutdown delay to 300 seconds,so that it can turn off after 5 minutes
- (3) Please switch to the GPS system(right press within 5s)

## **8. Wrong operation leads to crash.**

- (1) Whether the OBD2 interface uses other OBD devices (locator, tire pressure monitoring, drop lock lift window folding ELM27).
- (2) Modified and installed (central control navigation, electronic throttle controller, cruise control, brushed computer system , One-key startup , keyless entry, remote startup) will cause crashes, unplug other OBD devices and use this product directly to restore factory settings (see the setting table for details).
- (3) Long press in to enter the setting, press right to select restore factory settings, short press in to

confirm.

If it is not resolved, please switch to the GPS system for display, and press right for 5 seconds to select the GPS system.

## **GPS system FAQ:**

### **1.Nothing on the screen,no power**

Check whether the OBD cable is tightly connected, pull it out and plug it in several times, or plug USB cable into cigarette lighter.

### **2.No speed**

The GPS is flashing to search for stars. Please move the car to an open road. GPS display above 5 means it can be used normally only after searching 5 satellites.

### **3. Can not automatically turn on or turn off repeatedly during driving**

If you use OBD cable, enter the setting menu to select the "Sleep Voltage" and adjust the parameter value voltage to 13.0V or 12.8V.

### **4.Inaccurate satellite time**

Enter the setting item: Time Adjust, press right to adjust the time zone time, after adjustment, long press in to save and exit.

### **5.Inaccurate vehicle speed**

(1) Check whether the unit is correct, kilometers KM/mile MPH (speed unit switch please refer to the settings mode "speed unit").

(2) When the car leaves the factory, the manufacturer increases the speed displayed on the dashboard by 5-7%. International standards are based on satellite data.

(3)Fine-tune the vehicle speed, such as the instrument display 100 Km/h HUD display 105Km/h dial on the dial to adjust the parameter value to 102.

### **6.Wrong driving direction**

Satellites can not read your driving direction when there is no speed. It will be normal until >5KM/H.

### **7.Speed is still on after the car stops**

Underground parking lots, tunnels, and overpasses, when there are obstructions, the signal will be unstable. Satellites will drift. Please drive to an open road. If the number of satellites found is more than 5, it will be normal.

### **8. After the car is turned off, it will not automatically shut down**

When the OBD cable is connected, the machine will automatically shut down after 3 minutes

If the machine has not shut down after 5 minutes after stopping the flame, adjust the parameter value of the shutdown voltage setting to 13.5V.