OBD smart digital meter

Model P13

(This product Design Patent and Display Images Copyright had been registered with customs record) Thanks for purchasing our OBD smart digital device. This product connects car OBD2 interface by OBD cable, and display the driving datas, e.g. vehicle speed, engine RPM, water temperature, fuel consumption, voltage etc. It can keep the driver's eyes always on road to avoid the dangerous of lowering down head to read the dashboard. This product won't change any car ECU datas.

Kindly Attention:

OBD2 mode working voltage: 11V ~ 18Vdc (12Vdc / 200mA)

System selection: Select the language and system after power-on, dial the right dial to select OBD or GPS system, and enter the last selected system automatically after 5 seconds without operation

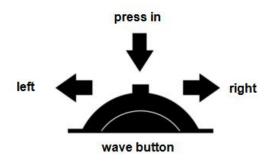
Button and port functions:



- 1.Setting button:it can push left / right, short / long press in
- 2. Suction cup mount place
- 3. Alternate port
- 4.Light sensor: Sensing external light intensity and automatically adjusting brightness to suit the environment

5.OBD cable interface

Setting button/wave button function



- 1 Short press in (quick press in the button and release within 1 second):
 - (1) to switch the display mode
 - (2) to choose menu after entering the setup menu
- 2 Long press in(press in the button more than 2 seconds and release):
 - (1) to enter the setting menu
 - (2) to save and exit after setting

3 Pull left:

- (1) to switch the functions in the left area
- (2) to change the setting options

4 Pull right:

- (1) to switch the functions in the right area
- (2) to change the setting options

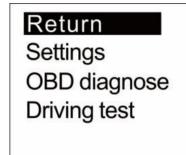
Below are the functions abbreviations:

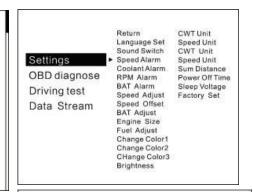
ECT - Engine Coolant Temperature	VLT - Voltage	FUE - Fuel Consumption
RPM - Revolutions Per Minute	TIM - Local time	MIN-Driving time
DIS - Driving Distance	MAP - Intake Pressure	OIT - Oil Temperature
A/F - Air-fuel Ratio	TCP - Turbine Pressure	PSI - Turbine Pressure

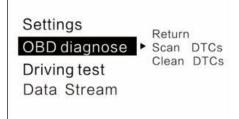
RTC - Real-Time Clock	ALS -Altitude	DIR-driving direction
TPS -Throttle	IAT - intake temperature	ELD engine load
GPS -GPS satellite numbers		

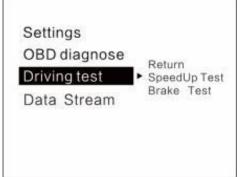
Setting Mode(Menu mode)

Long press the button vertically for 2 seconds to enter the setting item, dial down the button to select the menu, short vertical press to confirm, after adjustment, long press vertically for 2 seconds to save and exit









<u>Language Set</u>: Please choose your familiar language (EN-English / CN-Simplified Chinese/ TW-Traditional Chinese)

Sound Switch: turn on/off the buzzer

Speed Alarm: the default value is 150 (the default value can be changed, pull down is to decrease, pull up is to increase, adjust range is 5-200km/h)

<u>Coolant alarm</u>: default value is 120°, it means this device will give alarm when Coolant temperature is over 120°(adjust range is 50-200)

RPM alarm: default value is 6000 r, it means this device will give alarm when RPM over 6000 r(adjust range is 1000-8000)

BAT Alarm: default value is 10.5V, it means this device will give alarm when battery voltage is lower than 10.5V(adjust range is 10.0-15.0V)

Speed Adjust: adjust the speed according to the dashboard, default value is 107% (if the speed is different with the dashboard, then can adjust the value. For example, if the dashboard speed is 100Km/h, and the device speed is 105KM/h, then please adjust the value to 102)

Speed Offset: When the vehicle turns off,but the device speed is not 0, then adjust the device Speed Offset value (if the device speed shows 5KM/H, then change the device Speed Offset default value at 6)

BAT Adjust: if the battery voltage is different with the vehicle, it can be adjusted.

(if the device voltage is 0.2V higher than the dashboard's, please change the value to 98%)

Engine Size: if the fuel consumption is much different with the dashboard, please change it as the Displacement size(for example, if the vehicle displacement is 3.6L, please change the default value to 3.6L)

<u>Fuel adjust</u>: default value is 100%, it can be adjusted when the fuel consumption is different with the dashboard.

(for example, if the device fuel consumption is 0.2L higher than the dashboard, please adjust it to 98%)

Change Color 1: the speed color in the main display interface

Change Color 2: the left side functions color on the screen

Change Color 3: the right side functions color on the screen

<u>Brightness</u>: default 0(Automatic sensitivity),1-8(the brightness will be increased as the digital added)

CWT Unit : default coolant temperature is °C, also can be changed to °F

Speed unit: KM/h or MPH can be changed

<u>Sum distance</u>: can make the total driving distance same as dashboard(if the dashboard shows the sum distance is 30010Km,the user can make the device value at 30010KM)

<u>Power off time</u>: default power off time is 10s, for Auto start and stop cars, please make the power off time to 5-300s

<u>Sleep Voltage</u>: default is off, if the device can't auto off, please adjust the voltage at 13.2V or higher <u>Factory set</u>: short press in to do the factory set

Time adjust: default time is GMT+8(China time), can change the it to local time by pulling up/down.

Driving test:

Speedup test: show the speed, distance, driving 400m takes time, driving 100m takes time **Acceleration test:** kilometers acceleration refers to the seconds 0 to 100km/h, is a test of car power **Brake Test:** Brake when the speed is over 100 KM/H, then it show brake distance and time

Error code set:

Scan DTCs:scan the ECU to check if there is the error code,and show the error details **Clean DTCs:**switch to Clean the DTCs,short press in the button to finish the cleaning **Data Stream:** Show all the vehicle data stream

Please note:

It is recommended to unplug the device if your car doesn't been used for more than one week.

OBD2 System Troubleshooting

1. The screen without any display, and no power

Start the car engine; check if the OBD cable line is tight; please pull down the OBD cables more times to ensure; check if product power switch turns on. If still no display ,please change another car to test, analyze whether the car OBD diagnostic interface is good, if it is not good, please repair it and try 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) This product OBD2 mode does not support OBD I and JOBD
- (3) OBD2 is a car protocol(U.S.A Cars:2003 Other regions:2007)
- (4) Switch to the GPS system , within 5 seconds of power Pull right the button to select the GPS system.

3.Inaccurate Speed

- (1). First check the speed unit is correct or not, the speed unit including KM/H and MPH, please refer to the setting to switch the unit.
- (2). When the product is power on, long press in the button to enter into the menu option, pull right the button to choose the speed adjust, short press in the button to set the value, pull left or right to change the value. (if the dashboard shows 100, and the device shows the 105, change the default value at 102)

4. There is an error on 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. The device can not auto power off

Adjust the sleep voltage to 13.2V or 13.6V, then HUD will power off in 3 minutes.

6. Auto start- stop cars

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

7.HUD crashes in driving, or Hybrid car

- (1)Adjust the shutdown voltage setting in the system settings to COM mode
- (2)If it is not resolved, adjust the shutdown delay setting in the system settings to 300 seconds, and shut down after 5 minutes after the car goes out.
- (3)If it is not resolved, please switch to the GPS system for display. Within 5 seconds after the power is turned on, select the GPS system.

8. Wrong operation lead to crashes

- (1)Does the OBD2 interface use other OBD equipment (positioner, tire pressure monitoring, drop lock, lift window folding, ELM27)
- (2)Modified and retrofitted (central control navigation electronic throttle accelerator fixed speed cruise brushed computer system
- (3)One-key start, keyless entry, remote start) will cause crashes, unplug other OBD devices and use the product directly, to restore factory settings (see the setting table for details)
- (4)Press and hold the scroll wheel to enter the setup menu, right-click the scroll wheel to switch to system settings, press the scroll wheel vertically to enter the system settings, right-click the scroll wheel to switch to factory settings, and press the scroll wheel vertically to confirm.
- (5)If you haven't solved it, please switch to GPS system. Turn on the power and turn the dial for 5

seconds to select the GPS system.

GPS System Troubleshooting:

1. The screen without any display, and no power

Start the car engine; check if the cable line is tight;

2.Without car Speed

After HUD power-on, the GPS will start to find the satellite. Please drive the car to the road. It will work once gets more than 5 satellite signals.

3. Cannot be turned on automatically or repeatedly extinguished during driving

Change the sleep voltage to 13.0V or 12.8V

4.Inaccurate time

Enter the setting items: system time adjustment, turn the dial to the right to adjust the time zone time, after adjusting, press the dial vertically shortly for 2 seconds to save and exit

5.Inaccurate Speed

- (1)First check the speed unit is correct or not, the speed unit including KM/H and MPH,please refer to the setting to switch the unit.
- (2)The car manufacturers usually make the dashboard speed 5-7% higher than the ECU. The international standard is based on satellite data.

(if the dashboard shows 100, and the device shows the 105, change the default value at 102)

6. Driving direction display error

After the vehicle speed exceeds 5KM / H, the direction can be displayed normally.

7. Speed is still displayed after the car stops

Under the underground parking lot, tunnel, under the overpass, there will be unstable satellite drift when there is obstruction. Please drive the vehicle to the empty road. The number of satellites found is more than 5 and it shows normal.

8 The device cannot auto power off when the car is turned off

- (1)If connects by OBD cable, it will auto power off in 3 minutes.
- (2) If it still not powers off in 5 minutes, please change the sleep voltage to 13.5V