Car Smart Digital Meter

Model: T812

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Introduction
The main function is to display the car dashboard information (e.g. speed, driving direction, local time, driving distance, driving time), and keep the driver’s eyes always on road to avoid the dangerous of lowering down head to read the dashboard.

Kindly Attention:
OBD2 mode working voltage: 11V~18VDC (12vdc/200ma), when voltage is higher than 24v, please use a USB cable for GPS mode

System Choice:
This product is a dual system (OBD2+GPS): push left the wave button to choose OBD2 or GPS system, if you have no operation, after 5 seconds, HUD will automatically enter into the OBD2 system.

For second use, when HUD start, if don’t push the wave button, after 5 seconds, HUD will automatically enter into the system the last time chosen.

OBD System: available for cars with OBD2 interface (Only OBD line can be used)
GPS System: universal for cars, buses, trucks (Both OBD line and USB line can be used)

Restart the machine and choose the GPS system to use when the OBD2 system is not compatible.
Key functions

1. Setting button: it can push left / right, short / long press in
2. Light sensor
3. Power interface

Button functions:

1. Short press in: (1) switch the display mode (2) confirm the menu after enter into
   the menu
2. Push left: (1) switch between OBD and GPS system within 5 seconds after power
   up (2) switch the left area functions (3) change the function setting after enter into
   the menu
3. Push right: (1) switch the right area functions (2) change the function setting after
   enter into the menu
4. Long press in: after enter into the menu and finish the setting, long press in for 5
   seconds to keep and exit.
Push left/right to switch function:

Below are function abbreviations

ECT - Engine Coolant Temperature       VLT - Voltage       FUE - Fuel Consumption
RPM - Revolutions Per minute            ODO - Odometer      TIM - Single Driving Time
DIS - Single Driving Distance           MAP - Manifold Air Pressure
OIT - Oil Temperature                   A/F - Air Fuel Ratio
TCP - Turbo-charging Pressure           PSI - Pounds per Square Inch (Intake air pressure)
GPS - the available satellites          DIR - Driving Direction
RTC - Real-Time Clock                   ASL - Altitude

Setting Mode (Menu mode)

Long press in to enter into the setting mode, push right to choose the menu, and short press in to confirm. Once finishing the setting, long press in to exit.
When in GPS system:

Setting functions

in the menu(setting) mode, all the default value can be changed, push left is to decrease, push right is to increase

Language Set: Please choose your familiar language (English/Simplified Chinese/Traditional Chinese)

Sound Switch: turn on/off the buzzer

Speed Alarm: the default value is 150 (the default value can be changed, push left is to decrease, push right is to increase)

Coolant alarm: default value is 120°, it means this device will give alarm when Coolant temperature is over 120°

RPM alarm: default value is 6000 r, it means this device will give alarm when RPM over 6000 r
**BAT Alarm**: default value is 10.5V, it means this device will give alarm when battery voltage is lower than 10.5V

**Speed Adjust**: adjust the speed according to the dashboard, default value is 107%

**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 5

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

**Engine Size**: the default value is 1.6 L, if the fuel consumption is much different with the dashboard, please change it as the Displacement size

**Fuel adjust**: default value is 100%, it can be adjusted

**Change Color 1**: the top functions color on the screen

**Change Color 2**: the left side/middle functions color on the screen

**Change Color 3**: the right side/bottom functions color on the screen

**Brightness**: 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

**Sum distance**: can make the total driving distance same as dashboard (if the dashboard shows the sum distance is 30000Km, the user can make the device value at 30000KM)

**Power off time**: default power off time is 10s, for Auto start and stop cars, please make the power off time to 180-240s

**Sleep Voltage**: default is off, if the device can’t auto off, please adjust the voltage at 13.2V or higher

**Factory set**: short press in to do the factory set

**Driving test**

**Speedup test**: show the speed, distance, driving 400m takes time, driving 100m takes time

**Brake Test**: Brake when the speed is over 60 KM/H, then it show brake distance and time

**Data Stream**

Show all the vehicle data stream
**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.

**Please note:**

It is recommended to unplug the OBD device if your car doesn’t been used for more than one week. Due to the OBD equipment for long power, standby current is about 20mA, in theory, the use time of a common battery is 1 month, surely, situation of each car is different.

**Technical Parameters:**

Environment temperature: -40℃ to +80℃
Atmospheric pressure: 86-106KPa
Relative Humidity: 10% - 95%
Environmental noise: ≤ 60dB (A)
Alarm sound level: ≥ 30dB (A)
Working voltage: 5V ~ 24Vdc (12Vdc / 400mA)
Product size: 107x57x20 mm
Product Weight: 50 g

**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 shows the car voltage and be automatic power off after 60 second when the device is with power
   This product just available for cars with OBD2 agreement and EU-OBD agreement (European region: after 03 years, Other region: after 07 years)
   This Products donnot support JOBD and OBDI and recommended test for another car.
3. Inaccurate Speed
   a. 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.

   b. When the product is powered on, long press in the button to enter into the menu option, and right push once switch to setting, then short press in the button to the menu, and right push the button switch to the speed adjust option. (if the dashboard shows 100, and the device shows the 101, change the default value at 106%)

4. Inaccurate Fuel consumption
   Check your car displacement, and set the device same as your car (if your car is 2.0L, then change the device value at 2.0L). The fuel consumption can be adjusted, but we don’t suggest to change it, because all the data are read from the car ECU directly.

5. RPM Alarm
   Default alarm is 6000, please refer to the setting to change.

6. Over speed alarm
   Default alarm is 150 KM/H, please refer to the setting to change the value.

7. The device cannot auto power off
   A. After vehicle turns off, the device still display the speed, switch the setting to Speed Offset, and adjust the value same as the device speed. (if the device shows 5KM/H after the vehicle turns off, then change the speed offset at 5KM/H)
   B. After vehicle turns off, the device still display the RPM, switch the setting to sleep voltage, and make the value at 13.2V

8. Auto start and stop cars
   Change the Power off time to 180s

9. Wrong operation lead to crashes
   Do a factory set
GPS System Troubleshooting

1. The screen without any display, and no power
   Start the car engine; check if the cable line is tight; or connect the USB to the computer to check

2. Inaccurate time
   When the device search the satellite successfully (the default 8:00 will change to China local time), set it to your local time and save and exit.

3. Inaccurate Speed
   When the product is power on, long press in the button to enter into the menu option, and right push once switch to setting, then short press in the button to the menu, and right push the button switch to the speed adjust option. (if the dashboard shows 100, and the device shows the 101, change the default value at 106%)

4. Over speed alarm
   Default alarm is 150KM/H, please refer to the setting to change the value.

5. The device cannot auto power off
   After vehicle turns off, the device still display the speed, switch the setting to Speed Offset, and adjust the value same as the device speed. (if the device shows 5KM/H after the vehicle turns off, then change the speed offset at 5KM/H)

6. Wrong operation lead to crashes
   Do a factory set