User Manual

OBD-II Engine Code Reader with Bluetooth® Technology

PP-2145
Specifications:

- Working environment temperature: -40°C ~ 85°C
- Voltage: 9-16VDC
- Working current: 45mA
- Standby current: < 40mA
- Wireless data sampling rate: 1Mbps ~ 3Mbps
- Weight: 20g
- Dimensions: 45.2(L) x 41.3(W) x 19.5(H) mm

Communication Protocols:

This product uses ELM-327 hardware; it will only work with compatible OBD-II protocols. Please check with your vehicle manufacturer that the OBD-II protocols and pin layout is compatible with your vehicle.

- SAE J1850 VPW (10.4Kbaud)
- SAE J1850 PWM (41.6Kbaud)
- SAE J1850 PWM (10.4Kbaud)
- ISO9141-2 (5 baud init, 10.4K baud)
- ISO14230-4 KWP (5 baud init, 10.4K baud)
- ISO14230-4 KWP (fast init, 10.4K baud)
- ISO15765-4 CAN (11bit ID, 500 Kbaud)
- ISO15765-4 CAN (29bit ID, 500 Kbaud)
- ISO15765-4 CAN (11bit ID, 250 Kbaud)
- ISO15765-4 CAN (29bit ID, 250 Kbaud)
- ISO15765-4 CAN / SAE J2480 (CAN BUS)
- ISO14230-4 (KWP2000)
OBD-II Socket Compliant with DLC-J1962:

OBD-II Pin Layout:

Pin 1......SAE J2411, GM single wire CAN;GM Single line CAN-BUS  
Pin 2......ISO 11519-4 (Bus+)(SAE J1850), Used with PIN 10, 41.6 Kbps PWM (Pulse width modulation) single usage: use PIN 2 only, 10.4 Kbps VPW (Variable pulse width modulation) byte header + CRC, no "checksum" or "inter-byte separation" (In Frame response byte ?)  
Pin 3......Chrysler, CCD+ (not OBD); Chrysler CCD-BUS LAN cable H line  
Pin 4......Chassis ground  
Pin 5......Signal ground  
Pin 6......ISO 15765-4;CAN-BUS high speed diagnostic cable (H line), 250/500 kbit/s  
Pin 7......KWP1281 or KWP2000 protocol diagnostic cable (K line), Baud rate 10400/most of manufacturer default KPW2000 diagnostic cable  
Pin 8......IG+; ON/Off  
Pin 9......If PIN 7 can not be used, use *KWP1281 or KWP2000 diagnostic cable (K line), Baud rate 10400  
Pin 10.....ISO 11519-4 (Bus-)(SAE J1850), use with PIN 2, 41.6 Kbps PWM  
Pin 11....Chrysler, CCD- (not OBD) ;Chrysler CCD-BUS LAN cable L line  
Pin 12....* K line, manufacturer defined  
Pin 13....* K line, manufacturer defined  
Pin 14....ISO 15765-4;CAN-BUS high speed diagnostic cable (L line), 250/500 kbit/s  
Pin 15....KWP1281 or KWP2000 protocol diagnostic cable (K line); 7P for Insufficient or excessive enabled control unit  
Pin 16...BAT+
**Viewable Parameters:**

- Vehicle Speed
- RPM
- Fuel Consumption
- Engine Coolant Temp
- Fuel Pressure
- Calculated Engine Load
- Throttle Position
- Intake Manifold Pressure
- Air Intake Temp
- Timing Advance
- Mass Air Flow
- Fuel Level
- Barometric Pressure
- EVAP System Vapor Pressure
- Fuel Trim

* Note: Not all measurements will be available in some cars. Viewable parameters differ depending on the app.

**Recommended Apps:**

The recommended app from the App Store is:

- iOBD2

The recommended apps in the Google Play store are:

- Torque Lite (OBD2 & Car)
- Torque Pro (OBD2 & Car)

**Note:**

*These apps are not designed by the manufacturer, or by Electus Distribution Pty. Ltd or any of its proprietary’s. Uses of the apps are at the discretion of the customer, who is wholly responsible for any costs, charges or affects it may have on their Smartphone or Tablet as a result.*
Instructions for iOBD2 Pairing:

1. Using your iOS device, download and install the full app from the App store - payment may be needed.

2. After installing, open the app and go to ‘Settings’ to select your language. If the default language is already correct to your need, there is no need to do this step.

3. Turn on the Bluetooth® technology function on your device.
   **NOTE:** **DO NOT** pair with any device at this stage. Pairing **MUST** be done through the App.

4. Turn on the ‘Accessories’ of your car, do not start the ignition.

5. Insert the OBD-II device to the OBD-II socket of your vehicle.
6. Go to the ‘Settings’ in the app; change the ‘Hardware’ to ‘ELM327’ and the ‘Connection’ to ‘Bluetooth 4.0 / PP2145’.
7. After changing these settings, the app will scan for the OBD-II device automatically. Select PP2145 and click ‘done’ when it is found. If it does not scan automatically, please go to the ‘Settings’ and ‘Connection’ to check that you have selected the correct connection – ‘Bluetooth 4.0 / PP2145’.

8. Wait for the app to pair with the OBD-II device. The pairing status will be shown at the top of the screen.

9. Once it shows ‘Connection Successful’ then you can use the app according to your need.

10. If you have trouble pairing, delete the configuration and start the process again. Do this by going into ‘Settings’, ‘Connection’, find the device name that you paired before, click on the name and select ‘Delete Configuration’.

NOTE: If “Connection Failed” comes up during the pairing process, this may be a result of not following the correct set up procedure, or this unit does not support your car’s OBDII Protocol. Please note that it will continue to attempt pairing even if pairing is not successful.
Instructions for Torque Pairing:

1. Using your Android device, download and install the app from the Google Play Store.
2. After installing, turn Bluetooth® technology function of your device through the phone settings.
3. Search for Bluetooth® technology devices, and pair to ‘PP2145’.
4. Open up the Torque app. Go to ‘Settings’ and ‘OBD2 Adapter Settings’.

5. Choose the ‘Connection Type’ as ‘Bluetooth’ and select ‘PP2145’
6. Start to use the app according to your need.