

**User Manual** 

# OBD-II Engine Code Reader with *Bluetooth®* Technology



## **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)
- ISO9141-2(5 baud init, 10.4K baud).
- ISO14230-4 KWP (5 baud init, 10.4Kbaud)
- ISO14230-4 KWP (fast init, 10.4Kbaud)
- ISO15765-4CAN (11bit ID, 500 Kbaud)
- ISO15765-4CAN (29bit ID, 500 Kbaud)
- ISO15765-4CAN (11bit ID, 250 Kbaud)
- ISO15765-4CAN (29bit ID, 250 Kbaud)
- ISO15765-4/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) ;ChryslerCCD-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+

- 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<sup>®</sup> technology function on your device.

*NOTE:* <u>DO NOT</u> pair with any device at this stage. Pairing <u>MUST</u> be done through the App.

📶 中国移动 奈	10:56	<b>2</b> 65% 💷	••••• 中国移动 奈 👘	10:56	9 🖇 65% 💷	📶 中国移动 奈	10:57	🛯 🕴 65% 💷
_	Settings	_	Settings Blu	etooth		Settings	Bluetooth	_
Airplane	e Mode	OFF	Bluetooth			Bluetooth		
🛜 Wi-Fi		CYTZ >	Devices			Devices		
Bluetoo	th	On >	Searching		A CALCE	PP2145		Not Paired
Carrier	CH		Now D	iscoverable		Nov	w Discoverable	9
C Do Not	Disturb	OFF						
O Notifica	tions	>						
General		••						
Sounds		>						

- 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'.



 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 to go the 'Settings' and 'Connection' to check that you have selected the correct connection – 'Bluetooth 4.0 / PP2145'.

	112145.		Diactoo	incetion	COIII
75%	Select service	11:48 🚯	75%	Select service	11:48 🚯
Done	Bluetooth 4.0		• 2	Bluetooth 4.0	Ę
	vice	Scanning dev	A. C.	vice	Scanning devic
		PP2145			PP2145
	Select service				
		0xFFF0			
	Cancel				

- 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'.

159 🚯 PID: 59775 (EOU: E8) 65	<b>10:58</b> 🚯 🛛 Eléase Wait
Settings	Bluetooth 4.0
Language	Bluetooth SSID
Language English	PP
Connection	Bluetooth UUID
Hardware ELM327	7BB1186466D57A065CDA724356B9
Connection Bluetooth 4.0	Service UUID
Vehicle 1996 Acura 0.8L Petrol	0x
Unit	
System unit Metric	
Temperature unit	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<sup>®</sup> technology function of your device through the phone settings.
- 3. Search for Bluetooth<sup>®</sup> 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.