

# **CARTEK**

## **AUTOMOTIVE ELECTRONICS**

### **OBD2 CAN-Bus Signal Converter**



Outputs:

**BLUE** wire ..... RPM signal

**GREEN** wire ... Road Speed signal

**GREY** wire ..... Engine running/stopped

**YELLOW** wire .. Vehicle traveling/stationary

#### **INTRODUCTION**

Many aftermarket car accessories such as Gear Shift Lights, Tachometers or Digital Gear Displays require connection to electrical signals which are often not available on modern cars. The CAN-Bus Signal Converter from **CARTEK** simply plugs into the OBD (On Board Diagnostic) socket found on most modern cars and provides four useful signals by extracting and converting engine data from the car's CAN-Bus network.

#### **INSTALLATION**

Locate the car's OBD2 socket which will be within 60cm (2ft) of the steering wheel. Insert the CAN-Bus Signal Converter then start the engine. If this is the first time the CAN-Bus Signal Converter has been installed then it may take a short while for it to interrogate the car's CAN-Bus network and synchronize to the correct protocol. This will be indicated by a Red LED.

Once the correct protocol has been determined then engine data will be extracted from the CAN-Bus network and converted into output signals. This will be indicated by a flashing Green LED.

#### **OUTPUT SIGNALS**

##### **RPM (Blue wire)**

This is a 12v square wave signal where the frequency increases with engine speed. The signal outputs 2 pulses per crankshaft revolution

##### **SPEED (Green wire)**

This is a 12v square wave signal where the frequency increases with road speed. The output frequency is approximately 2500 pulses per kilometer (1570 pulses per mile).

##### **ENGINE RUNNING (Grey wire)**

This signal remains high (+12v) when the engine is stationary and is driven low (0v) when engine speed exceeds 350RPM.

##### **VEHICLE TRAVELING (Yellow wire)**

This signal remains high (+12v) when the car is stationary and is driven low (0v) when road speed exceeds 9 Km/h (6mph).

**[www.CARTEKMOTORSPORT.com](http://www.CARTEKMOTORSPORT.com)**

*For off-road use only*