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).

Outputs:

BLUE wire ...... RPM signal
GREEN wire ..... Road Speed signal
GREY wire ...... Engine running/stopped
YELLOW wire .. Vehicle traveling/stationary

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For off-road use only
Shift Light Wiring Diagram

- ENGINE RPM output signal (blue)
- GND (black)
- Not used (green)
- Not used (grey)
- Not used (yellow)

CARTEK
OBD2 CAN-Bus Converter
CK-CC-04

IGN 12V (red)
PROGRAM WIRE (white)

CARTEK
Shift Light
CK-LS-07

Gear Indicator Wiring Diagram

- ENGINE RPM output signal (blue)
- ROAD SPEED output signal (green)
- GND (black)
- Not used (grey)
- Not used (yellow)

CARTEK
OBD2 CAN-Bus Converter
CK-CC-04

IGN 12V (red)
PROGRAM WIRE (white)

CARTEK
Digital Gear Indicator
CK-LG-06

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