

# VAD Pro-901 OBD-II Signal Protocols



Any given vehicle will likely only implement one of the protocols. Often it is possible to make an educated guess about the protocol in use based on which pins are present on the J1962 connector:

- SAE J1850 PWM (pulse-width modulation - 41.6 k-baud, standard of the Ford Motor Company)
  - pin 2: Bus+
  - pin 10: Bus-
  - High voltage is +5 V
  - Message length is restricted to 12 bytes, including CRC
  - Employs a multi-master arbitration scheme called 'Carrier Sense Multiple Access with Non-Destructive Arbitration' (CSMA/NDA)
  
- SAE J1850 VPW (variable pulse width - 10.4/41.6 k-baud, standard of General Motors)
  - pin 2: Bus+
  - Bus idles low
  - High voltage is +7 V
  - Decision point is +3.5 V
  - Message length is restricted to 12 bytes, including CRC
  - Employs CSMA/NDA