# **PCS MOTEC CAN Connection User Guide**

MOTEC CAN enabled ECU's are connected to the PCS D200 using CAN. MOTEC ECU's communicate at 1 Mbps while all other PCS CAN devices (besides the D200) communicate at 500 kbps. The D200 can accommodate two different CAN data rates by connecting PCS devices to CAN A and MOTEC ECU's to CAN B. Only connect the MOTEC on the CAN bus with other devices that communicate at 1 Mbps.

#### **MOTEC Software version 2.x.**

In the MOTEC ECU Manager, go to Adjust > General Setup > Miscellaneous > Setup

Set CAN Data Set to 4.

Set CAN Address 1520.

Your Motec is ready to send data to the D200.

## **MOTEC Software version 3.x and Later**

In the MOTEC ECU Manager, go to Adjust > General Setup > Communications > CAN Setup

Set CAN 0 Data to 8 (Custom Data Set 1 Sequential)

Set CAN 0 Address to 1520

Next go to Adjust> General Setup> Communications> Setup Custom Data Sets...

Setup Data Set 1 to transmit the follow data in order:

RPM (RPM)
 Throttle Position (TP)
 Manifold Pressure (MAP)
 Inlet Air Temp (AT)
 Engine Temp (ET)
 Lambda 1 (La1)
 Lambda 2 (La2)

8. Exhaust Man Pressure (EMAP)

9. Mass Air Flow (MAF) 10. Fuel Pressure (FP) 11. Oil Temp (OT) 12. Oil Pressure (OP)

13. Exhaust Gas Temp 1 (EGT1)14. Exhaust Gas Temp 2 (EGT2)15.User Channel 1 (User 1)16. User Channel 2 (User 2)17. User Channel 3 (User 3)

18. User Channel 4 (User 4)

19. Battery Voltage (Bat V)

20. ECU Internal Temp (ECU T) 21. Left Drive Speed (LD Spd)

22. Left Ground Speed (LG Spd)

23. Right Drive Speed (RD Spd) 24. Right Ground Speed (RG Spd)

25. Drive Speed26. Ground Speed

27. Fuel Cut Level (FuelCut)

28. Ign Cut Level (Ign Cut)
29. Ign 1 Advance (I Adv 1)

30. Load Point (Load)

31. Efficiency Point (Effcy)

32. Fuel Used (F Used)

33. Fuel Actual Pulse W (F APW)

34. Fuel Effective PW (F EPW)

35. Fuel Inj Duty Cycle (F Duty)

36. Gear (Gear)

## Wiring

Refer to Appendix J of the MOTEC M400/M600/M800/M880 User Manual

### **D200 Notation**

Items on the D200 are displayed using an abbreviation. The abbreviations are listed on the following page.

Description	D200 Abbreviation
Engine RPM	RPM
Throttle Position	TPS
Manifold Pressure	MAP
Inlet Air Temp	MAT
Engine Temp	CLT
Lambda 1	AFR1
Lambda 2	AFR2
Exhaust Man Pressure	EXPR
Mass Air Flow	MAF
Fuel Pressure	FPRS
Oil Temp	OTMP
Oil Pressure	OPRS
Exhaust Gas Temp 1	EGT1
Exhaust Gas Temp 2	EGT2
User Channel 1-4 Not Displayed	
Battery Voltage	BATT
ECU Internal Temp	ETMP
Left Drive Speed	SPD1
Left Ground Speed	SPD2
Right Drive Speed	SPD3
Right Ground Speed	SPD4
Drive Speed	DSPD
Ground Speed	GSPD
Fuel Cut Level	FCUT
Ignition Cut Level	ICUT
Ignition Advance	ADV
Load Point	LDPT
Efficiency Point	EFPT
Fuel Used	FUEL
Fuel Actual Pulse Width	PW
Fuel Effective PW	EFPW
Fuel Injector Duty Cycle	DUTY
Gear	GEAR

LIMITED WARRANTY STATEMENT. Powertrain Control Solutions, LLC. Warrants all merchandise against defects in factory workmanship and materials for a period of 12 months after purchase. This warranty applies to the first retail purchaser and covers only those products exposed to normal use or service. Provisions of this warranty shall not apply to Powertrain Control Solutions, LLC. Product used for a purpose for which it is not designed, or which has been altered in any way that would be detrimental to the performance or life of the product, or misapplication, misuse, negligence or accident. On any part or product found to be defective after examination by Powertrain Control Solutions, LLC., Powertrain Control Solutions, LLC. will only repair or replace the merchandise through the original selling dealer or on a direct basis. Powertrain Control Solutions, LLC. assumes no responsibility for diagnosis, removal and/or installation labor, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of merchantability or fitness, and any other obligation on the part of Powertrain Control Solutions, LLC., or selling dealer.

**Powertrain Control Solutions**