



Vehicle CAN Database

Emerald
K3

Overview

Racelogic have acquired CAN signals for customers to use with VCI (Vehicle CAN Interface) products. This information is available by listening on the relevant CAN bus on the vehicle and interpreting the messages to form easy to use information which is then available for data logging.

VBox Video HD2 Users

Users of VBox Video HD2 will find this vehicle available to be selected via the VBox Video setup software which can be downloaded from our website. The software is supplied with instant access to the CAN information for a large array of vehicles and is kept automatically up to date as new vehicles and signals are added (Subject to internet connection).

To start using HD2 with your vehicle simply follow the steps below:

1. Open VBox Video Setup
2. Click the "Settings" menu option
3. Select "CAN"
4. Select "Vehicle database" under "Source"
5. Select "Emerald" and "K3"
6. Tick the signals you wish to use

Use with other Racelogic Products

Users of other Racelogic products will need to download a file from our website here:

<https://vboxmotorsport.co.uk/index.php/en/customer-area/vehicle-can-database>

Select "Emerald" and "K3" from the dropdown selection to download the relevant file.

Refer to the user manual of your product for details on how to use this file.

Wiring Connection

In order to connect to an Emerald ECU the CAN datalink setting in the Emerald ECU configuration software must be set to Emerald/Generic.

To wire the CAN bus to the Racelogic system a bare wire cable must be used which is wired into the COMMS connector on the rear of the Emerald. The following pin assignments are used:

CAN High - Pin 1 on the DB9 COMMS Connector

CAN Low - Pin 2 on the DB9 COMMS Connector

PLEASE NOTE: This information is provided as a general guide to CAN Bus wire colours only and colours may be subject to change without notice. Racelogic accepts no responsibility for damage or malfunction caused by incorrect wiring of its products to a vehicle. Any connection to a vehicle CAN Bus should be done by a trained automotive technician.

CAN bus Connection

The CAN bus must be configured at a baud rate of 1M and with CAN Acknowledgement enabled and with CAN Termination enabled.

Cable - VBox Video HD2

To connect the HD2 system to a vehicle CAN bus system using a bare wire, an [RLCAB015L](#) cable must be used.

[Click here](#) for a cable drawing including PIN outs for the RLCAB015L.

Note: If the connection needs to be made using a bare wire interface with the CAN High and Low outputs of the vehicle, we strongly recommend contacting a qualified auto-electrician to perform the fitting.

Cable - Other Racelogic Products

To connect between your racelogic product and the vehicle a bare wire Cable is available, if this was not supplied with the product please contact us for details.

Available CAN Channels

The following signals are available for selection:

Signal	Default Units
Air Fuel Ratio	
Air Fuel Ratio 2	
Air Pressure	kPa
Air Temperature	°C
Aux Temperature	°C
Battery Voltage	V
Boost Pressure - Target	kPa
Coil on Time	ms
Coolant Temperature	°C
Engine Speed	rpm
Error Flags	
Exhaust Temperature	°C
Fuel Pressure	kPa
Gear	
Ignition Advance	°
Indicated Vehicle Speed	mph
Injector Duration	%
Manifold Pressure	kPa
Oil Pressure	kPa
Selected Map	
Status Flags	
Throttle Position	%
Wheel Speed FL	mph
Wheel Speed FR	mph
Wheel Speed RL	mph
Wheel Speed RR	mph

Note: not all signals listed above will be applicable to all variants of this vehicle and so may not be available for your specific vehicle.

Support

If any data contained in this document is incorrect or for further support please visit our website here: <http://www.vboxmotorsport.co.uk/support>