



Vehicle CAN Database

BMW

1 Series (E81/E82/E87/E88) 2004-2013

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 "BMW" and "1 Series (E81/E82/E87/E88) 2004-2013"
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 "BMW" and "1 Series (E81/E82/E87/E88) 2004-2013" 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

On this vehicle CAN data is not available via the OBD Port. Instead CAN connection cables can be found in various positions around the vehicle; behind trim in the passenger footwell, behind the fuse or glove box, behind rear seat side bolsters in the rear passenger pillar or inside the main loom.

The CAN cables are a twisted pair usually in the following colours:

CAN High - Blue/Red

CAN Low - Red

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 500k.

Cable - VBox Video HD2

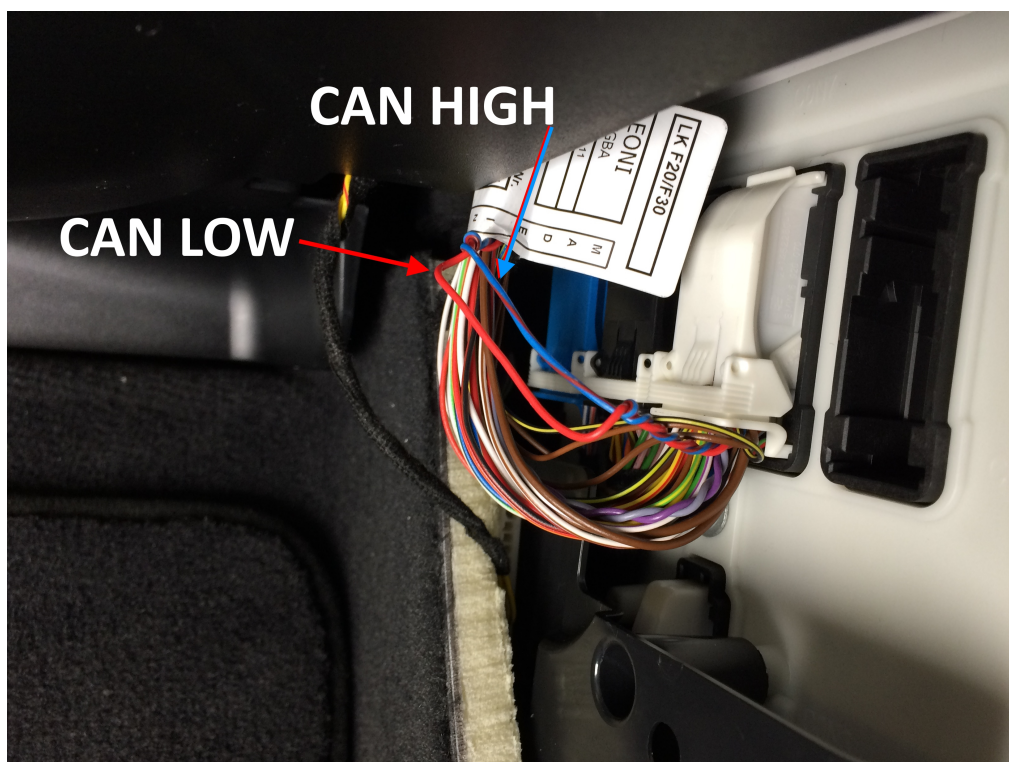
To connect the HD2 system to a vehicle CAN bus system using a bare wire, an [RLCAB015L](#) cable must be used.

[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 |
|-------------------------------------|------------------|
| Brake Position | |
| Brake Pressure - Front Left | |
| Brake Pressure - Front Right | |
| Brake Pressure - Rear Left | |
| Brake Pressure - Rear Right | |
| Coolant Temperature | °C |
| Engine Speed | rpm |
| Gyroscope | ° |
| Indicated Lateral Acceleration | m/s ² |
| Indicated Longitudinal Acceleration | m/s ² |
| Indicated Vehicle Speed | |
| Manifold Pressure | mbar |
| Odometer Reading | km |
| Oil Temperature | °C |
| Steering Angle | ° |
| Throttle Position | |
| Wheel Speed FL | km/h |
| Wheel Speed FR | km/h |
| Wheel Speed RL | km/h |
| Wheel Speed RR | km/h |

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: <https://www.vboxmotorsport.co.uk/support>