MBE CAN broadcast protocol

Version 1.2 (26 October 2004) Written by Jody England

1.0 Overview

In addition to mbe's USB CAN protocol a selection of systems offered by mbe support various other CAN protocols. This document describes the broadcast protocol. Logging systems usually require a continuous stream of realtime data and this broadcast protocol is suited to this task.

2.0 Description

Baud: Fixed at 500 Kb

Address: User Selectable Standard (11bit) or extended (29bit)

Bytes: 8 Data Bytes numbered from 1 to 8

The ECU will cycle through up to 256 messages transmitting one message every 10 ms (subject to CAN bus loading).

Packet Structure:

Byte 1: Message Index (user selectable from 0 to 8 inclusive)

Bytes 2 to 7: Data

The data will be either Byte (8 bit) or Word (16 bit). The byte order of word parameters (eg. Intel / Motorola format) will be user selectable.

3.0 Setup Instruction

Having established communication between mbe's easimap and the ECU in question (this can be over RS232 or CAN) from the main menu select :-

- 1. Data / CAN Datastream / Setup
- 2. You need to select either 29bit or 11bit identifier
- 3. Having Selected 29bit or 11bit you will need to select an "identifier" from the drop down list. Each packet is capable of transmitting 1 index byte plus 7 bytes of data. You will need to select the number of packet types (maximum 8), and then select parameters for broadcast in the packets.

Scalings for each selected parameter can be obtained by placing the equivalent parameter onto a page in easimap, then Right Click on parameter and select the information field. Scaling and resolution information is then available.