AiM InfoTech

Stack TPMS Control Unit

Release 1.00

1
Software configuration

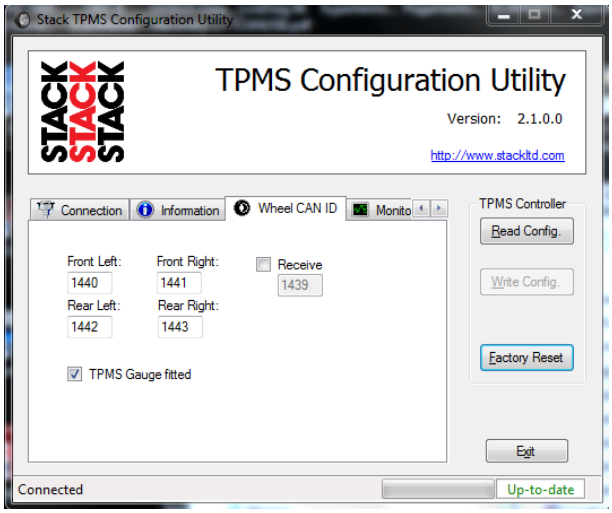
This document explains how to connect third party CAN expansion modules to AiM devices CAN2 bus.

For Stack TPMS modules to correctly communicate with AiM device it is necessary to set them up using the dedicated software. Refer to the TPMS manufacturer for additional details.

Make sure that in the Stack TPMS Configuration Utility the output CAN stream is set with the following default parameters:

Baudrate: **1Mbit/s (1000kbit/s)**

CAN ID for Front Left sensor:**1440 (0x5A0)**
CAN ID for Front Right sensor:**1441(0x5A1)**
CAN ID for Rear Left sensor: **1442 (0x5A2)**
CAN ID for Rear Right sensor:**1443 (0x5A3)**



Please note: In case this module is going to be used with different parameters, the user can set up a custom driver from the **CAN Protocols** section of the AiM configuration software Race Studio 3. Check the dedicated manual from the AiM website www.aim-sportline.com, Documentation – Firmware/Software area.

2
Wiring connection

These modules feature a bus communication protocol based on CAN, this data stream is accessible through the 6 way connector (AS107-35PN) on the TPMS control module.
Here pictured is the mating connector AS607-35SN to be installed on the loom.

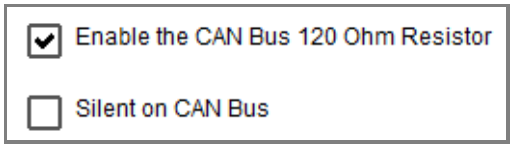
Pin nr	Stack cable color	Function	AiM wire label (optional harness)
1	Red	B+	
2	Blue	CAN-L	CAN2 -
3	Green	CAN-H	CAN2 +
4	Yellow	RS232-TX	
5	White	RS232-RX	
6	Black	B-	

3
AiM device configuration

Before connecting the kit to the AiM device set this up using AiM Race Studio software. The parameters to select in the device configuration are:

- ECU manufacturer: **STACK**
- ECU Model: **TPMS_CONTROL_UNIT** (Only RS3 – CAN2 Stream)

If there is only the AiM device connected to this module, enable the CAN Bus 120 Ohm Resistor.



4
“STACK – TPMS_CONTROL_UNIT” protocol

Channels received by AiM devices configured with “STACK – TPMS_CONTROL_UNIT” protocol are:

CHANNEL NAME	FUNCTION
FL ID	Identifier Front Left
FL PRES	Tire pressure Front Left
FL TEMP	Tire temperature Front Left
FL STATUS	Status sensor Front Left
FR ID	Identifier Front Right
FR PRES	Tire pressure Front Right
FR TEMP	Tire temperature Front Right
FR STATUS	Status sensor Front Right
RL ID	Identifier Rear Left
RL PRES	Tire pressure Rear Left
RL TEMP	Tire temperature Rear Left
RL STATUS	Status sensor Rear Left
RR ID	Identifier Rear Right
RR PRES	Tire pressure Rear Right
RR TEMP	Tire temperature Rear Right
RR STATUS	Status sensor Rear Right