

AiM InfoTech

BRIGHTWATER - TPMS

Release 1.00

Modules



1 Software configuration

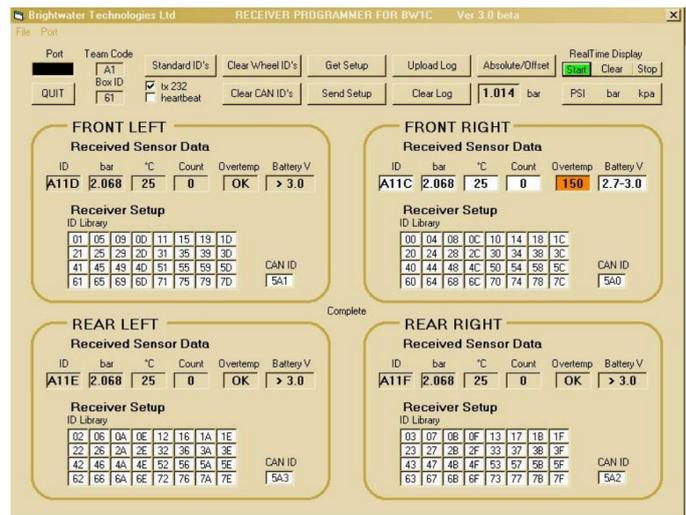
This document explains how to connect third party CAN expansion modules to AiM devices CAN2 bus.

For Brightwater TPMS modules to correctly communicate with the AiM device, it is necessary to set them up using the dedicated software. Refer to the TPMS manufacturer for additional details. The supported model is the TMS AS Receiver CAN/RS232. Newer products have different protocols.

Make sure that in the BW TPMS Monitor the output CAN stream is set with the following default parameters:

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

- CAN ID for Front Right sensor: **0x5A0**
- CAN ID for Front Left sensor: **0x5A1**
- CAN ID for Rear Right sensor: **0x5A2**
- CAN ID for Rear Left sensor: **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 (AS007-35SN) on the TMS AS Receiver CAN/RS232, here pictured with its connection table.



Pin nr	Function	AiM wire label (optional harness)
1	Power in + 8-24V	
2	Power in GND	
3	RS232-TX	
4	RS232-RX	
5	CAN-Lo	CAN2 -
6	CAN-Hi	CAN2 +

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: **BRIGHTWATER**
- ECU Model: **TPMS** (Only RS3 – CAN2 Stream)

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

<input checked="" type="checkbox"/> Enable the CAN Bus 120 Ohm Resistor
<input type="checkbox"/> Silent on CAN Bus



4

“BRIGHTWATER – TPMS” protocol

Channels received by AiM devices configured with “BRIGHTWATER – TPMS” protocol are:

CHANNEL NAME	FUNCTION
WSFR PRESS	Tire pressure Front Right
WSFR TEMP	Tire temperature Front Right
WSFR IR TEMP	Tire infrared temperature Front Right
WSFR STATUS FLG	Status sensor Front Right
WSFL PRESS	Tire pressure Front Left
WSFL TEMP	Tire temperature Front Left
WSFL IR TEMP	Tire infrared temperature Front Left
WSFL STATUS FLG	Status sensor Front Left
WSRR PRESS	Tire pressure Rear Right
WSRR TEMP	Tire temperature Rear Right
WSRR IR TEMP	Tire infrared temperature Rear Right
WSRR STATUS FLG	Status sensor Rear Right
WSRL PRESS	Tire pressure Rear Left
WSRL TEMP	Tire temperature Rear Left
WSRL IR TEMP	Tire infrared temperature Rear Left
WSRL STATUS FLG	Status sensor Rear Left