

AiM InfoTech

Tire Watch TPMS

Release 1.00



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Software configuration

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

For Tire Watch 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 Tire Watch Racing Configuration Tool the output CAN stream is set with the following parameters:

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

CAN ID for Front sensors: **0x320**

CAN ID for Rear sensors: **0x321**

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.

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Wiring connection

These modules feature a bus communication protocol based on CAN, this data stream is accessible through the CANbus cable coming out of the control module through the following flying leads:

Cable color	Function	AiM wire label (optional harness)
Green	CAN High	CAN2 +
White	CAN Low	CAN2 -

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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: **TIRE_WATCH**
- 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

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“TIRE_WATCH – TPMS” protocol

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

CHANNEL NAME	FUNCTION
VB STATE FL	Battery voltage state Front Left
ACC STATE FL	Wheel spinning state Front Left
TEMP FL	Tire temperature Front Left
PRES FL	Tire pressure Front Left
VB STATE FR	Battery voltage state Front Right
ACC STATE FR	Wheel spinning state Front Right
TEMP FR	Tire temperature Front Right
PRES FR	Tire pressure Front Right
VB STATE RL	Battery voltage state Rear Left
ACC STATE RL	Wheel spinning state Rear Left
TEMP RL	Tire temperature Rear Left
PRES RL	Tire pressure Rear Left
VB STATE RR	Battery voltage state Rear Right
ACC STATE RR	Wheel spinning state Rear Right
TEMP RR	Tire temperature Rear Right
PRES RR	Tire pressure Rear Right