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AiM Infotech

AiM pressure sensor 0-10 bar Race Studio 3 configuration

Release 1.01



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Introduction

Once pressure sensor 0-10 bar is physically connected to one of the device channels, it has to be loaded in the related configuration using AiM configuration software. In this datasheet it is loaded using **Race Studio 3** software.

2

Setup with Race Studio 3

- with the device switched on and connected to the PC run the software and select the device the sensor is connected to
- select the configuration the sensor is to be loaded on or create a new one pressing “New” and select “Channels” layer as here below
- select the channel where to set the sensor (in the example below channel01)

The screenshot shows the RaceStudio3 3.20.13 software interface. The 'Channels' tab is active, displaying a table of configured channels. The table has columns for ID, Name, Function, Sensor, Unit, Freq, and Parameters. The 'Channel01' row is highlighted in blue.

ID	Name	Function	Sensor	Unit	Freq	Parameters
RPM	<input checked="" type="checkbox"/> RPM	Engine RPM	RPM Sensor	rpm	20 Hz	max: 16000 ; factor: 1 ;
Spd1	<input type="checkbox"/> Speed1	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd2	<input type="checkbox"/> Speed2	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd3	<input type="checkbox"/> Speed3	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd4	<input type="checkbox"/> Speed4	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch01	<input checked="" type="checkbox"/> Channel01	Voltage	Generic 0-5 V	mV	20 Hz	
Ch02	<input checked="" type="checkbox"/> Channel02	Voltage	Generic 0-5 V	mV	20 Hz	
Ch03	<input checked="" type="checkbox"/> Channel03	Voltage	Generic 0-5 V	mV	20 Hz	

- a configuration panel shows up
- select: "Pressure" function as well as the kind of pressure to sample among:
 - Oil Pressure
 - Brake Pressure
 - Wheel Brake Pressure
 - Fuel Pressure
 - Pressure (generic pressure – as in the example)
- select the sensor "AiM 0-10 bar (X05PSA00010B10)", "AiM 0-10 bar (X05PSA00010B18)" or "AiM 0-10 bar (X05PSA00010B38)"
- select the channel sampling frequency, unit of measurement and number of decimal places
- press "Save"
- press "Transmit"

The screenshot shows the 'Channels' configuration window with a 'Channel Settings' dialog open for 'Channel01'. The dialog has the following settings:

- Name: Channel01
- Function: Analog Digital
- Function: Pressure
- Sensor: AiM 0 to 4 absolute bar (X05SNP31004A)
- Sampling Frequency: 20 Hz
- Unit of Measure: bar
- Display Precision: no decimal place

On the right side of the dialog, a list of sensors is shown, with 'AiM 0-10 bar (X05PSA00010B38)' highlighted in red. Other sensors in the list include: AIM 0 to 4 absolute bar (X05SNP31004A), AIM 0-5 bar (X05PSA00005B38), AIM 0-10 bar (X05SNP31010R), AIM 0-10 bar (X05PSA00010B38), AIM 0-100 bar (X05SNP31100R), AIM 0-100 bar (X05PSA00100B10), AIM 0-100 bar (X05PSA00100B38), AIM 0-160 bar (X05PSA00160B10), AIM 0-160 bar (X05PSA00160B18), AIM 0-50 psi (X05PSA00050P18), AIM 0-150 psi (X05PSA00150P18), AIM 0-160 bar (X05SNP31160R), AIM 0-160 psi (X05SNPR03000U), AIM 0-2000 psi (X05PSA02000P18), AIM VDO 0-2 bar, AIM VDO 0-5 bar, AIM VDO 0-10 bar, MSI 0-100 psi, MSI 0-150 psi, MSI 0-2000 psi, Bosch 5e0 0-250 bar, Kavlico 0-50 psi, Kavlico 0-500 psi, GM 0-3 bar, KA 0-150 psi, KA 0-500 psi, KA 0-3000 psi, KA 0-100 bar, PRESS 0-140 bar, PRS 831 0-50 psi abs, PRS 837 0-150 psi, PRS 832 0-15 psi, PRS 834 0-50 psi, PRS 838 0-300 psi, PRS 839 0-2000 psi, Variotom 0-100 bar (X05SNBO100), Variotom 0-16 bar (X05SNP13441), Variotom 0-160 bar (X05SNP13520), Variotom 0-4 bar abs (X05SNP31050).