

AiM InfoTech

AiM pressure sensor
0-50 PSI absolute
Race Studio 3 configuration

Release 1.01



Introduction

Once AiM pressure sensor 0-50 PSI absolute 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 Race Studio 3 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
 - Pressure (generic pressure – as in the example)
- select the sensor "AiM 0-50 PSI abs (X05PSA00050P18AK)"
- press "Save"
- press "Transmit"

The screenshot shows the RaceStudio3 (64 bit) 3.30.12 interface. The 'Channels' tab is active, displaying a list of channels and their functions. The 'Channel Settings' panel is open for 'Channel01', showing the 'Function' dropdown set to 'AIM 0-50 psi abs (X05PSA00050P18A)'. The 'Parameters' panel on the right shows settings for the selected channel, including 'max: 16000 ; factor: /1;' and 'wheel: 1600 ; pulses: 1;'. The 'Function' list includes various sensors such as RPM, Speed, Acceleration, and various pressure sensors.

ID	Name	Function
RPM	<input checked="" type="checkbox"/> RPM	Engine RPM
Spd1	<input type="checkbox"/> Speed1	Vehicle Spd
Spd2	<input type="checkbox"/> Speed2	Vehicle Spd
Spd3	<input type="checkbox"/> Speed3	Vehicle Spd
Spd4	<input type="checkbox"/> Speed4	Vehicle Spd
Ch01	<input checked="" type="checkbox"/> Channel01	AIM 0-50 psi abs (X05PSA00050P18A)
Ch02	<input checked="" type="checkbox"/> Channel02	AIM 0-10 bar (X05PSA00010B10)
Ch03	<input checked="" type="checkbox"/> Channel03	AIM 0-100 bar (X05PSA00100B10)
Ch04	<input checked="" type="checkbox"/> Channel04	AIM 0-160 bar (X05PSA00160B10)
Ch05	<input checked="" type="checkbox"/> Channel05	AIM 0-5 bar abs (X05PSA00005B38A)
Ch06	<input checked="" type="checkbox"/> Channel06	AIM 0-5 bar (X05PSA00005B38)
Ch07	<input checked="" type="checkbox"/> Channel07	AIM 0-10 bar (X05PSA00010B38)
Ch08	<input checked="" type="checkbox"/> Channel08	AIM 0-100 bar (X05PSA00100B38)
Acc1	<input checked="" type="checkbox"/> InlineAcc	AIM 0-15 psi (X05PSA00015P18)
Acc2	<input checked="" type="checkbox"/> LateralAcc	AIM 0-50 psi abs (X05PSA00050P18A)
Acc3	<input checked="" type="checkbox"/> VerticalAcc	AIM 0-50 psi (X05PSA00050P18)
Gyr1	<input checked="" type="checkbox"/> RollRate	AIM 0-150 psi (X05PSA00150P18)
Gyr2	<input checked="" type="checkbox"/> PitchRate	AIM 0-300 psi (X05PSA00300P18)
Gyr3	<input checked="" type="checkbox"/> YawRate	AIM 0-2000 psi (X05PSA02000P18)
Accu	<input checked="" type="checkbox"/> GPS Accuracy	AIM 0 to 4 absolute bar (X05SNP31004A)
Spd	<input checked="" type="checkbox"/> GPS Speed	AIM 0-10 bar (X05SNP3110R)
Alt	<input checked="" type="checkbox"/> Altitude	AIM 0-100 bar (X05SNP31100R)
OdoD	<input checked="" type="checkbox"/> Odometer	AIM 0-160 bar (X05SNP31160R)
Luma	<input checked="" type="checkbox"/> Luminosity	AIM 0-160 psi (X05SNP30300U)