

AiM InfoTech

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

Release 1.00

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# 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 (X05PSA00050P18A)"
- 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. A 'Channel Settings' dialog box is open for 'Channel01'. The 'Function' dropdown is set to 'AIM 0-50 psi abs (X05PSA00050P18A)', which is highlighted with a red box. The 'Sensor' dropdown is set to 'AIM 0-50 psi (X05PSA00050P18A)'. The 'Parameters' tab on the right shows settings for the selected channel, including 'max: 16000', 'factor: /1', and 'wheel: 1600; pulses: 1'.

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	
Ch02	<input checked="" type="checkbox"/> Channel02	
Ch03	<input checked="" type="checkbox"/> Channel03	
Ch04	<input checked="" type="checkbox"/> Channel04	
Ch05	<input checked="" type="checkbox"/> Channel05	
Ch06	<input checked="" type="checkbox"/> Channel06	
Ch07	<input checked="" type="checkbox"/> Channel07	
Ch08	<input checked="" type="checkbox"/> Channel08	
Acc1	<input checked="" type="checkbox"/> InlineAcc	Unit of Measure
Acc2	<input checked="" type="checkbox"/> LateralAcc	Display Precision
Acc3	<input checked="" type="checkbox"/> VerticalAcc	
Gyr1	<input checked="" type="checkbox"/> RollRate	
Gyr2	<input checked="" type="checkbox"/> PitchRate	
Gyr3	<input checked="" type="checkbox"/> YawRate	
Accu	<input checked="" type="checkbox"/> GPS Accuracy	
Spd	<input checked="" type="checkbox"/> GPS Speed	
Alt	<input checked="" type="checkbox"/> Altitude	
OdD	<input checked="" type="checkbox"/> Odometer	Odometer Total
Luma	<input checked="" type="checkbox"/> Luminosity	Brightness