

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 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 selected and highlighted in blue.

ID	<input checked="" type="checkbox"/>	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 (1) among:
  - Oil pressure
  - Brake Pressure
  - Wheel Brake Pressure
  - Pressure (generic pressure – as in the example)
- select the sensor "AiM 0-10 bar (X05PSA00010B10K)" or "AiM 0-10 bar (X05PSA00010B38K)" (2)
- press "Save" (3)
- press "Transmit" (4)

The screenshot shows the RaceStudio3 software interface. The 'Channels' tab is active, displaying a list of channels. Channel01 is selected, and its configuration panel is open. The configuration panel shows the following settings:

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

The configuration panel also includes a 'Channel Settings' dialog box with the following options:

- Channel01: Analog (selected), Digital

The main channel list includes the following channels:

ID	Name	Function	Sensor	Unit	Freq	Pr
RPM	<input checked="" type="checkbox"/> RPM	Engine RPM	RPM Sensor	rpm	20 Hz	ms
Spd1	<input type="checkbox"/> Speed1	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	whe
Spd2	<input type="checkbox"/> Speed2	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	whe
Spd3	<input type="checkbox"/> Speed3	Channel Settings				whe
Spd4	<input checked="" type="checkbox"/> Speed4	Channel Settings				whe
Ch01	<input checked="" type="checkbox"/> Channel01	Function				whe
Ch02	<input checked="" type="checkbox"/> Channel02	Function				whe
Ch03	<input checked="" type="checkbox"/> Channel03	Function				whe
Ch04	<input checked="" type="checkbox"/> Channel04	Sensor				whe
Ch05	<input checked="" type="checkbox"/> Channel05	Sampling Frequency				whe
Ch06	<input checked="" type="checkbox"/> Channel06	Unit of Measure				whe
Ch07	<input checked="" type="checkbox"/> Channel07	Display Precision				whe
Ch08	<input checked="" type="checkbox"/> Channel08	Function				whe
Acc1	<input checked="" type="checkbox"/> InlineAcc	Function				whe
Acc2	<input checked="" type="checkbox"/> LateralAcc	Function				whe
Acc3	<input checked="" type="checkbox"/> VerticalAcc	Function				whe
Gyr1	<input checked="" type="checkbox"/> RollRate	Function				whe
Gyr2	<input checked="" type="checkbox"/> PitchRate	Pitch Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	whe
Gyr3	<input checked="" type="checkbox"/> YawRate	Yaw Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	whe
Accu	<input checked="" type="checkbox"/> GPS Accuracy	GPS Accuracy	AIM GPS	mm	10 Hz	whe
Spd	<input checked="" type="checkbox"/> GPS Speed	Vehicle Spd	AIM GPS	km/h 0.1	10 Hz	whe
Alt	<input checked="" type="checkbox"/> Altitude	Altitude	AIM GPS	m	10 Hz	whe
OdD	<input checked="" type="checkbox"/> Odometer	Odometer Total	AIM ODO	km 0.1	1 Hz	whe
Luma	<input checked="" type="checkbox"/> Luminosity	Brightness	AIM Luminosity	%	1 Hz	whe