

AiM Infotech

AiM pressure sensor  
0-2000 PSI  
Race Studio 3 configuration

Release 1.00

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# 1

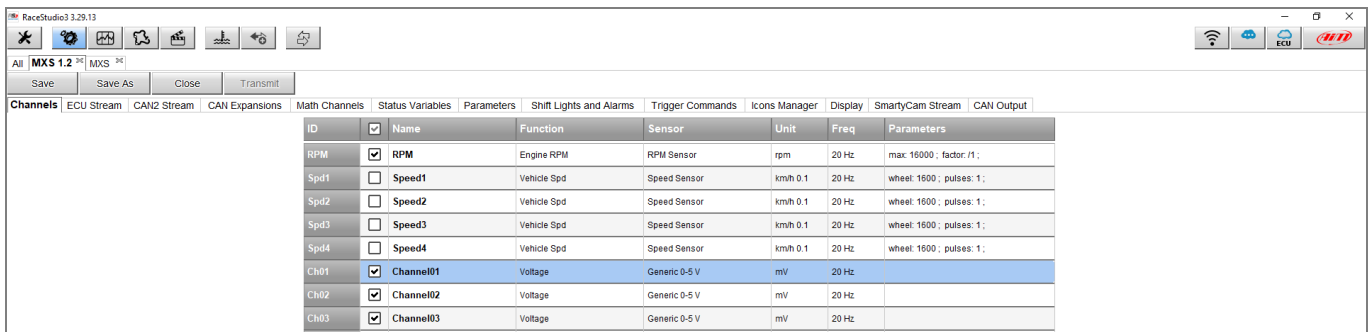
## Introduction

Once pressure sensor 0-2000 PSI 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 0-2000 PSI (X05PSA02000P18)"
- select the channel sampling frequency, unit of measurement and number of decimal places
- press "Save"
- press "Transmit"

The screenshot shows the RaceStudio3.3.20.13 interface. A configuration window for Channel01 is open, showing the following settings:

ID	Name	Function	Sensor	Unit	Freq	Par
RPM	<input checked="" type="checkbox"/> RPM	Engine RPM	RPM Sensor	rpm	20 Hz	max
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					
Spd4	<input type="checkbox"/> Speed4					
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					
Acc2	<input checked="" type="checkbox"/> LateralAcc					
Acc3	<input checked="" type="checkbox"/> VerticalAcc					
Gyr1	<input checked="" type="checkbox"/> RollRate					
Gyr2	<input checked="" type="checkbox"/> PitchRate	Pitch Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	
Gyr3	<input checked="" type="checkbox"/> YawRate	Yaw Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	
Accu	<input checked="" type="checkbox"/> GPS Accuracy	GPS Accuracy	AIM GPS	mm	10 Hz	
Spd	<input checked="" type="checkbox"/> GPS Speed	Vehicle Spd	AIM GPS	km/h 0.1	10 Hz	
Alt	<input checked="" type="checkbox"/> Altitude	Altitude	AIM GPS	m	10 Hz	
OdD	<input checked="" type="checkbox"/> Odometer	Odometer Total	AIM ODO	km 0.1	1 Hz	
Luma	<input checked="" type="checkbox"/> Luminosity	Brightness	AIM Luminosity	%	1 Hz	

The Channel Settings dialog for Channel01 is open, showing:

- Name: Channel01
- Function: Pressure
- Sensor: AIM 0 to 2000 PSI (X05PSA02000P18) (highlighted with a red box)
- Sampling Frequency: 20 Hz
- Unit of Measure: bar
- Display Precision: no decimal place

The sensor list on the right includes:

- 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 (X05PSA00160B38)
- AIM 0-50 psi (X05PSA00050P18)
- AIM 0-150 psi (X05PSA00150P18)
- AIM 0-160 psi (X05SNP31160R)
- AIM 0-2000 psi (X05PSA02000P18) (highlighted with a red box)
- AIM VDO 0-5 bar
- AIM VDO 0-10 bar
- MSI 0-100 psi
- MSI 0-150 psi
- MSI 0-2000 psi
- Bosch S60 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
- Variohm 0-100 bar (X05SNBO100)
- Variohm 0-16 bar (X05SNP13441)
- Variohm 0-160 bar (X05SNP13520)
- Variohm 0-4 bar abs (X05SNP31050)