

AiM Infotech

Pressure sensor
0-100 bar/0-1450 PSI
Race Studio 3 configuration

Release 1.00



1

Introduction

Once pressure sensor 1-100 bar is physically connected to one of the channels of AiM device it has to be loaded in the related configuration using AiM configuration software. In this datasheet it is loaded using **Race Studio 3** software.

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Setup with Race Studio 3

- with the device switched on and connected to a PC run the software and select the device the sensor is connected to;
- select the configuration sensor is to be loaded on or create a new one pressing "New" and select "Channel" layer shown here below;
- select the channel where to set the sensor (in the example below channel01) and click on the related cell of "Sensor" column;

The screenshot shows the RaceStudio3 3.05.02 software interface. The 'Channels' tab is active, displaying a table with columns: ID, Name, Function, Sensor, Unit, Freq, and Parameters. The 'Channel01' row is selected, and a mouse cursor is pointing at the 'Generic 0-5 V' cell in the 'Sensor' column.

ID	<input checked="" type="checkbox"/>	Name	Function	Sensor	Unit	Freq	Parameters
RPM	<input checked="" type="checkbox"/>	RPM	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 type="checkbox"/>	Channel01	Voltage	Generic 0-5 V	mV	20 Hz	
Ch02	<input type="checkbox"/>	Channel02	Voltage	Generic 0-5 V	mV	20 Hz	
Ch03	<input type="checkbox"/>	Channel03	Voltage	Generic 0-5 V	mV	20 Hz	
Ch04	<input type="checkbox"/>	Channel04	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 0-100 bar (X05SNP31100R)" (2)
- press "Save" (3)
- press "Transmit" (4)

The screenshot shows the RaceStudio3 3.05.02 software interface. The main window displays a list of channels with columns for ID, Name, Function, Sensor, Unit, Freq, and Parameters. Channel01 is selected, and its settings are shown in a pop-up 'Channel Settings' dialog box. The dialog box has the following fields:

- Name: Channel01
- Function: Pressure (marked with a circled 1)
- Sensor: AiM 0-100 bar (X05SNP31100R) (marked with a circled 2)
- Sampling Frequency: 20 Hz
- Unit of Measure: bar
- Display Precision: 2 decimal places

At the bottom of the dialog box, there are 'Save' and 'Cancel' buttons, with the 'Save' button marked with a circled 3. In the main window, the 'Transmit' button is marked with a circled 4.

ID	Name	Function	Sensor	Unit	Freq	Parameters
RPM	<input checked="" type="checkbox"/> RPM	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 type="checkbox"/> Channel02	Voltage				
Ch03	<input type="checkbox"/> Channel03	Voltage				
Ch04	<input type="checkbox"/> Channel04	Voltage				
Ch05	<input type="checkbox"/> Channel05	Voltage				
Ch06	<input type="checkbox"/> Channel06	Voltage				
Ch07	<input type="checkbox"/> Channel07	Voltage				
Ch08	<input type="checkbox"/> Channel08	Voltage				
AccX	<input checked="" type="checkbox"/> AccelerometerX	Inline Acc				
AccY	<input checked="" type="checkbox"/> AccelerometerY	Lateral Acc				
AccZ	<input checked="" type="checkbox"/> AccelerometerZ	Vertical Acc				
GyrX	<input checked="" type="checkbox"/> GyroX	Roll Rate				
GyrY	<input checked="" type="checkbox"/> GyroY	Pitch Rate				
GyrZ	<input checked="" type="checkbox"/> GyroZ	Yaw Rate				
Spd	<input checked="" type="checkbox"/> GPS Speed	Vehicle Sp				
OdD	<input checked="" type="checkbox"/> Odometer	Odometer Total	AIM ODO	km 0.1	1 Hz	