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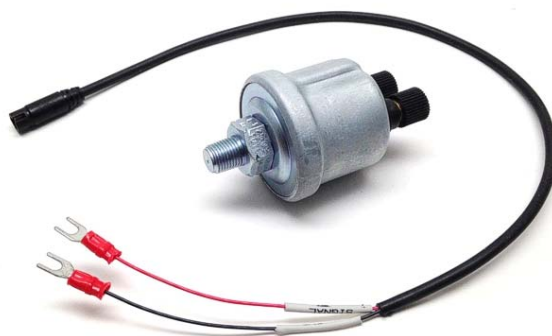
AiM Infotech

VDO pressure sensor 0-5 bar (0-72 PSI)

0-10 bar (0-145 PSI)

Race Studio 3 configuration

Release 1.00



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# 1

## Introduction

Once VDO pressure sensor 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.

# 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 "Channel" layer shown here below;
- select the channel where to set the sensor on (in the example below channel 01) 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 'Ch01' 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 (as in the example)
  - Brake Pressure
  - Wheel Brake Pressure
  - Pressure (generic pressure)
- select the sensor "AiM VDO 0-10 bar (or 0-5 bar)" (2)
- press "Save" (3)
- press "Transmit" (4)

The screenshot shows the RaceStudio3 3.05.02 interface. A 'Channel Settings' dialog box is open over the 'Channels' table. The dialog box contains the following fields:

- Name: Channel01
- Function: Oil Pressure (marked with a circled 1)
- Sensor: AiM VDO 0-10 bar (marked with a circled 2)
- Sampling Frequency: 20 Hz
- Unit of Measure: bar
- Display Precision: 2 decimal places
- Buttons: Save (marked with a circled 3) and Cancel

The 'Channels' table in the background is as follows:

ID	✓	Name	Function	Sensor	Unit	Freq	Parameters
RPM	✓	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	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch02	<input type="checkbox"/>	Channel02	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch03	<input type="checkbox"/>	Channel03	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch04	<input type="checkbox"/>	Channel04	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch05	<input type="checkbox"/>	Channel05	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch06	<input type="checkbox"/>	Channel06	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch07	<input type="checkbox"/>	Channel07	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch08	<input type="checkbox"/>	Channel08	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
AccX	✓	AccelerometerX	Inertial	AIM Internal Gyro	deg/s 0.1	50 Hz	
AccY	✓	AccelerometerY	Inertial	AIM Internal Gyro	deg/s 0.1	50 Hz	
AccZ	✓	AccelerometerZ	Inertial	AIM Internal Gyro	deg/s 0.1	50 Hz	
GyrX	✓	GyroX	Roll Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	
GyrY	✓	GyroY	Pitch Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	
GyrZ	✓	GyroZ	Yaw Rate	AIM Internal Gyro	deg/s 0.1	50 Hz	
Spd	✓	GPS Speed	Vehicle Spd	AIM GPS	km/h 0.1	10 Hz	
OdD	✓	Odometer	Odometer Total	AIM ODO	km 0.1	1 Hz	