

AiM Infotech

VDO pressure sensor

0-5 bar (0-72 PSI)

0-10 bar (0-145 PSI)

Race Studio 3 configuration

Release 1.00



1

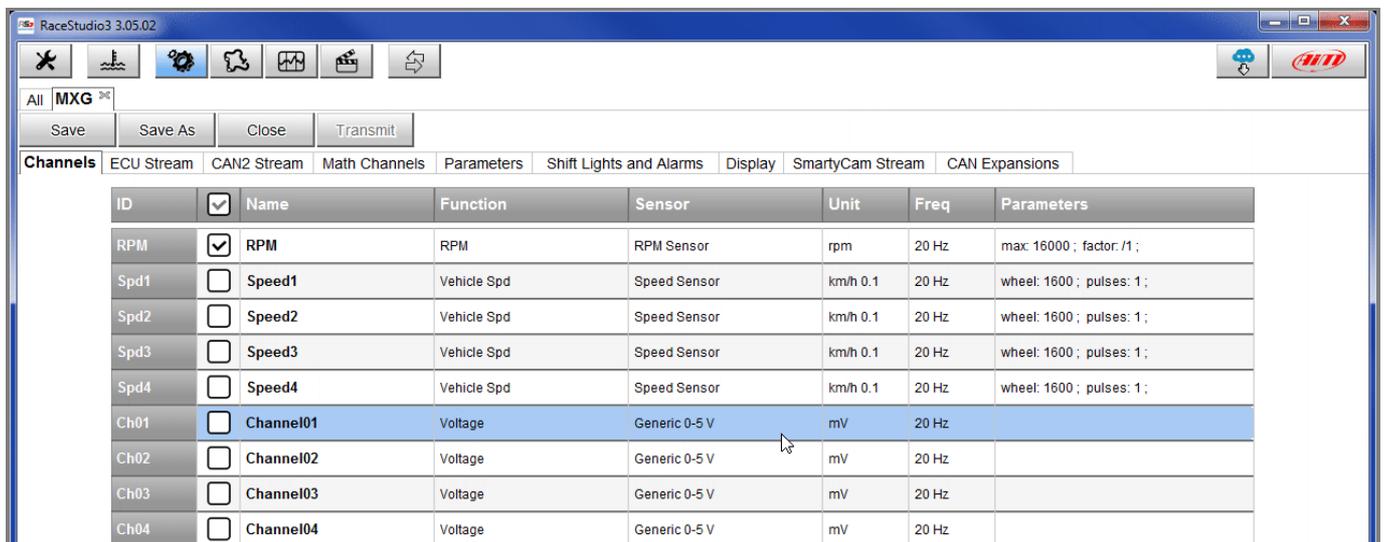
Introduction

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;



- 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 software interface. The main window displays a table of channels with columns for ID, Name, Function, Sensor, Unit, Freq, and Parameters. A dialog box titled "Channel Settings" is open, showing the configuration for Channel01. The dialog box has the following fields:

- Name: Channel01
- Function: Oil Pressure (indicated by a red circle and the number 1)
- Sensor: AIM VDO 0-10 bar (indicated by a red circle and the number 2)
- Sampling Frequency: 20 Hz
- Unit of Measure: bar
- Display Precision: 2 decimal places

The "Save" button is highlighted with a red circle and the number 3. The "Transmit" button in the top toolbar is highlighted with a red circle and the number 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 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 | <input checked="" type="checkbox"/> AccelerometerX | Inertial | AIM Internal Gyro | deg/s 0.1 | 50 Hz | |
| AccY | <input checked="" type="checkbox"/> AccelerometerY | Lateral | AIM Internal Gyro | deg/s 0.1 | 50 Hz | |
| AccZ | <input checked="" type="checkbox"/> AccelerometerZ | Vertical | AIM Internal Gyro | deg/s 0.1 | 50 Hz | |
| GyrX | <input checked="" type="checkbox"/> GyroX | Roll Rate | AIM Internal Gyro | deg/s 0.1 | 50 Hz | |
| GyrY | <input checked="" type="checkbox"/> GyroY | Pitch Rate | AIM Internal Gyro | deg/s 0.1 | 50 Hz | |
| GyrZ | <input checked="" type="checkbox"/> GyroZ | Yaw Rate | AIM Internal Gyro | deg/s 0.1 | 50 Hz | |
| Spd | <input checked="" type="checkbox"/> GPS Speed | Vehicle Spd | AIM GPS | km/h 0.1 | 10 Hz | |
| OdD | <input checked="" type="checkbox"/> Odometer | Odometer Total | AIM ODO | km 0.1 | 1 Hz | |