AiM Infotech

Car speed sensor – Race Studio 3 Configuration

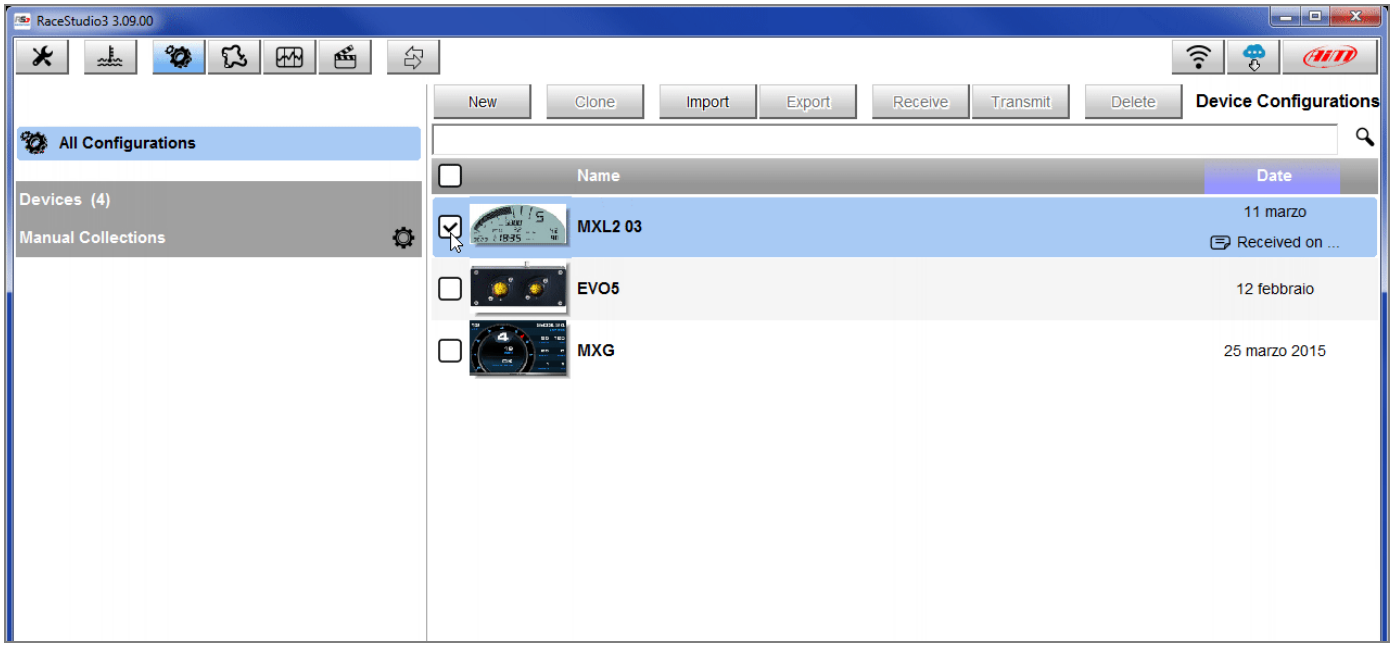
Release 1.00

1 Introduction

This datasheet explains how to configure the car speed sensor using AiM Race Studio 3 software.

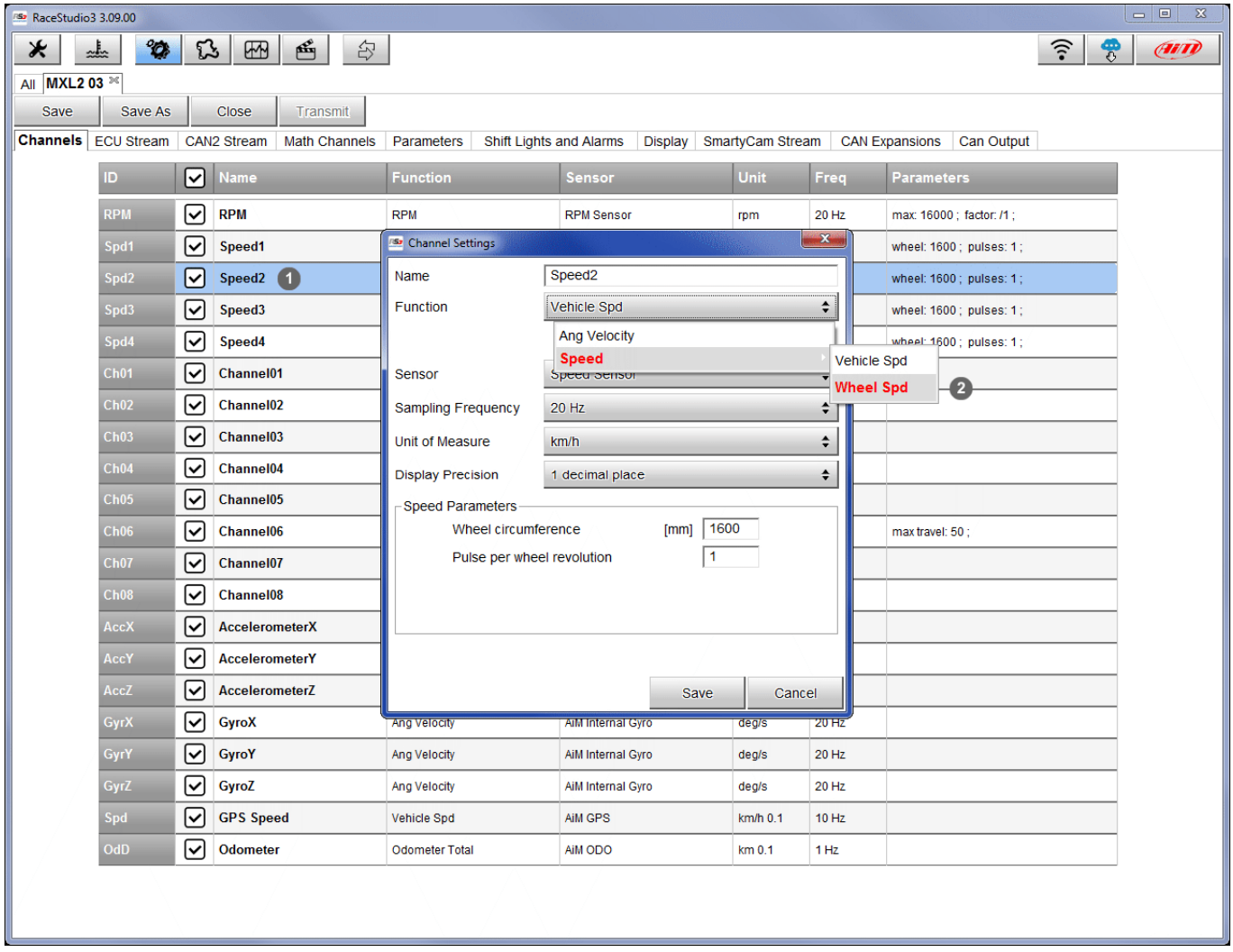
2 Setup with Race Studio 3

To load the car speed sensor in AiM logger configuration run the software and select the configuration you are going to load it on (in the example MXL2 03).



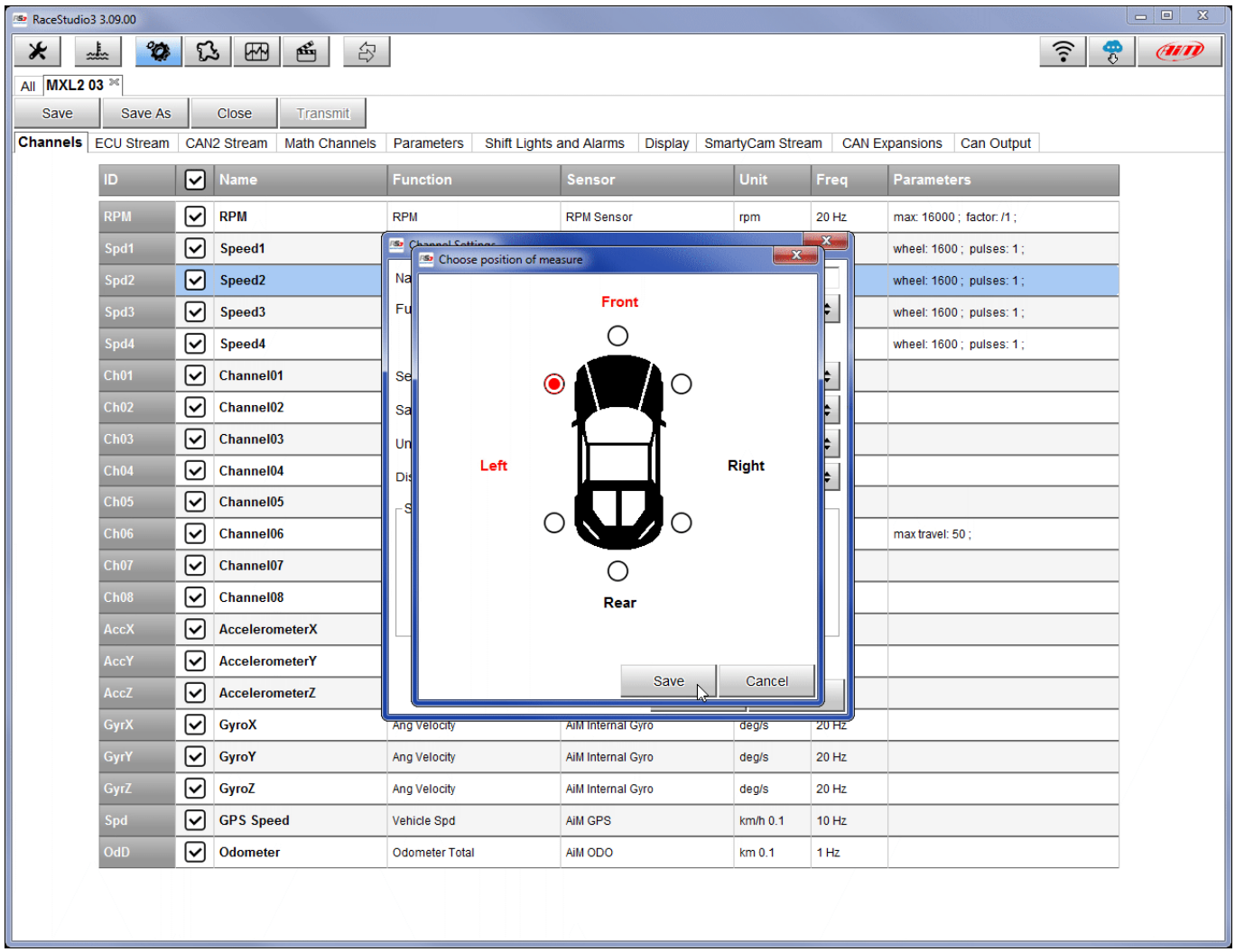
The software enters "Channels" layer.

- Select the speed channel where to set the sensor – in the example Speed2 (**1**) and fill in the panel that shows up
- Select "Speed" function and choose:
    - Vehicle Speed, fill in the panel and press "Save" or
    - Wheel Speed(**2**)

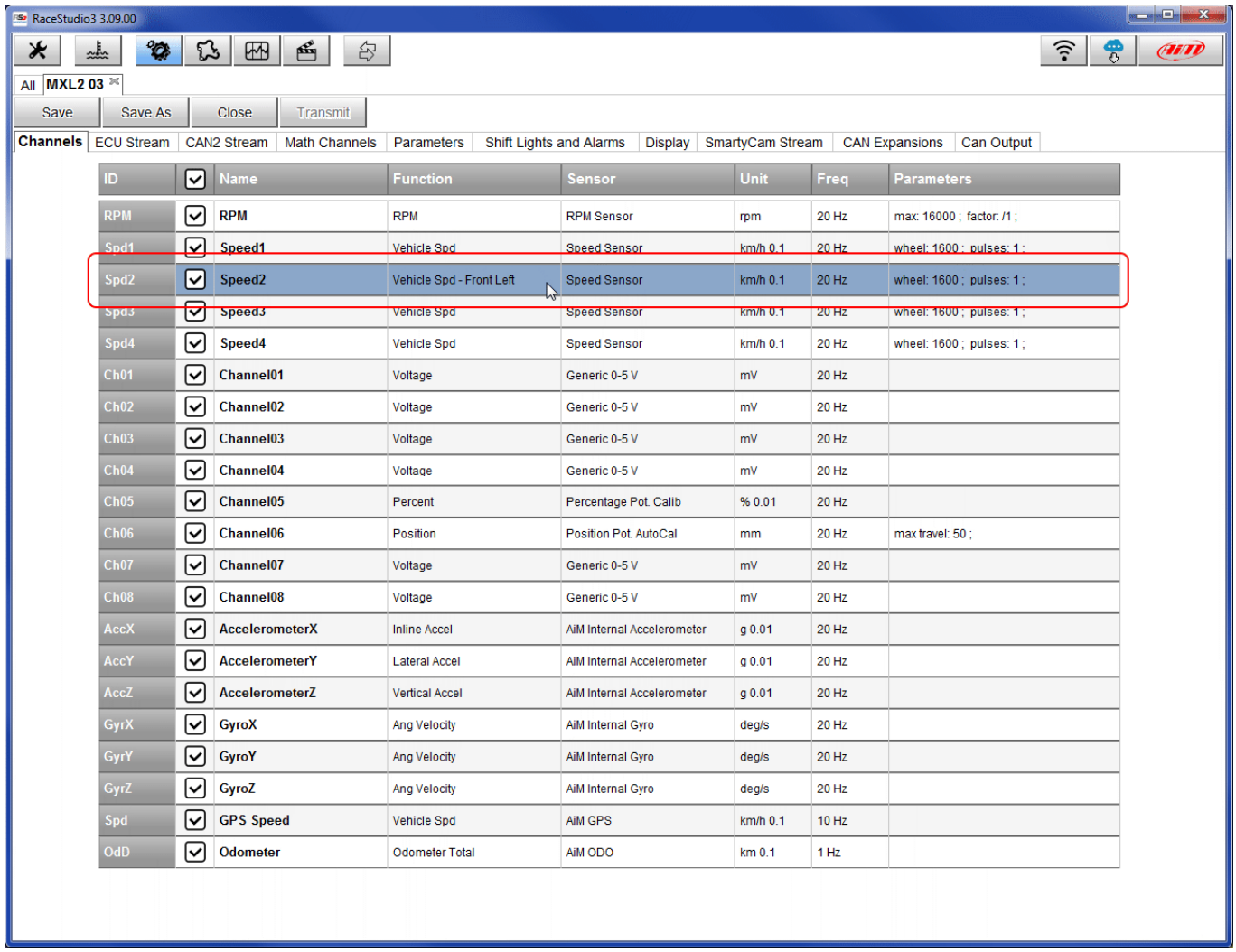


In this second case a "position" option appears:

- click it and choose the panel below shows up:
- select the wheel
- press "Save"
- press "Save" again

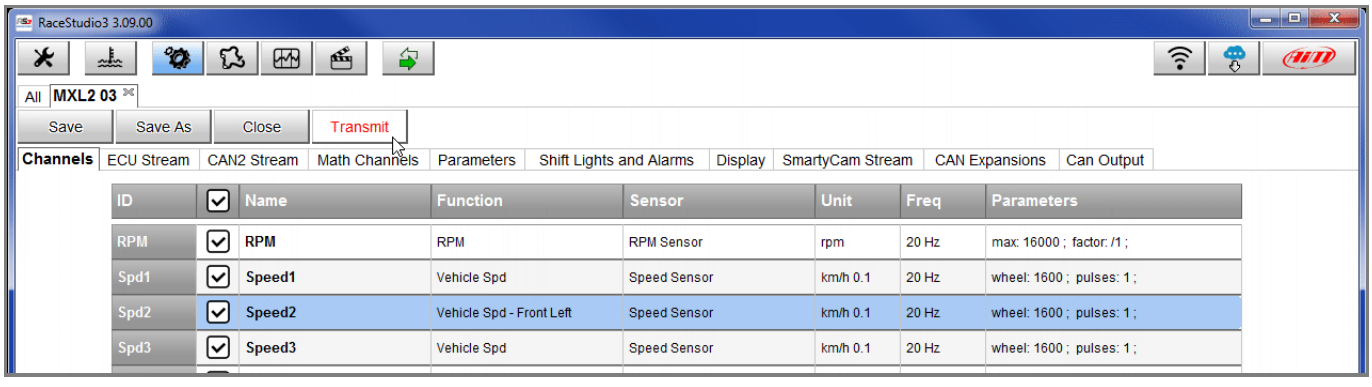


The software shows the sensor properly set. In the example the sensor is set on "Speed2" channel and connected to the front left wheel.



ID	Name	Function	Sensor	Unit	Freq	Parameters
RPM	RPM	RPM	RPM Sensor	rpm	20 Hz	max: 16000 ; factor: /1 ;
Spd1	Speed1	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd2	Speed2	Vehicle Spd - Front Left	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd3	Speed3	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd4	Speed4	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch01	Channel01	Voltage	Generic 0-5 V	mV	20 Hz	
Ch02	Channel02	Voltage	Generic 0-5 V	mV	20 Hz	
Ch03	Channel03	Voltage	Generic 0-5 V	mV	20 Hz	
Ch04	Channel04	Voltage	Generic 0-5 V	mV	20 Hz	
Ch05	Channel05	Percent	Percentage Pot. Calib	% 0.01	20 Hz	
Ch06	Channel06	Position	Position Pot. AutoCal	mm	20 Hz	max travel: 50 ;
Ch07	Channel07	Voltage	Generic 0-5 V	mV	20 Hz	
Ch08	Channel08	Voltage	Generic 0-5 V	mV	20 Hz	
AccX	AccelerometerX	Inline Accel	AiM Internal Accelerometer	g 0.01	20 Hz	
AccY	AccelerometerY	Lateral Accel	AiM Internal Accelerometer	g 0.01	20 Hz	
AccZ	AccelerometerZ	Vertical Accel	AiM Internal Accelerometer	g 0.01	20 Hz	
GyrX	GyroX	Ang Velocity	AiM Internal Gyro	deg/s	20 Hz	
GyrY	GyroY	Ang Velocity	AiM Internal Gyro	deg/s	20 Hz	
GyrZ	GyroZ	Ang Velocity	AiM Internal Gyro	deg/s	20 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	

Transmit the configuration to the logger pressing "Transmit".



ID	Name	Function	Sensor	Unit	Freq	Parameters
RPM	RPM	RPM	RPM Sensor	rpm	20 Hz	max: 16000 ; factor: /1 ;
Spd1	Speed1	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd2	Speed2	Vehicle Spd - Front Left	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd3	Speed3	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;