AiM Infotech

## Car/bike accelerometer Race Studio 3 configuration

## Release 1.00







InfoTech



## 1 Introduction

When the accelerometer is physically connected to a channel of your device it need to be loaded in the device configuration using AiM configuration software. In this datasheet it is loaded in using **Race Studio 3** software.

## 2 Race Studio 3 configuration

To load the sensor in the device configuration run the software and select the configuration the sensor is loaded on (in the example MXG 05):

🕋 RaceStudio3 3.13.00		
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	New Clone Import Export Receive Transmit Delete Device Corr	nfigurations
2 All Configurations		٩ ()
Devices (6)	Name Name	Date
Manual Collections	✓ 2 3 MXG 05	feb 16
	MXS 02	feb 16 ເ≩> feb 16
	MXG 104	gen 27 B≎ gen 27
	MXG 01 - CAN Output	9 novembre 2016
	MXS Strada 01	27 ottobre 2016
	C MXS	27 ottobre 2016
	EV04\$ 02	27 ottobre 2016
	□	27 ottobre 2016
Connected Devices	□ ( <sup>1</sup> <sub>5</sub> , <sup>1</sup> <sub>1995</sub> ) MXL2 03	27 ottobre 2016
No device connected	MIG	27 ottobre 2016
Trash		



The system enters "Channels" layer:

- select the channel where to set the sensor on in the example channel 1 (1) and fill in the panel that shows up
- select the function "Acceleration" and choose among :
  - o Inline acceleration
  - o Lateral Accel
  - Vertical Accel
  - Acceleration as in the example (2)
- select the sensor: "AiM accelerometer ±5g" (**3**)
- press "Save" (4)

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All MXG 05 ×							
Save Save As Close	Transmit						
Channels ECU Stream CAN2 Stream	Math Channe	els Parameters Shift Light	s and Alarms Display Sma	rtyCam Stream CAN Exp	ansions CAN Output		
	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	V Channel Settings		Hz	wheel: 1600 ; pulses: 1 ;	
	Spd3	Speed3	V. Name	Channel01	Hz	wheel: 1600 ; pulses: 1 ;	
	Spd4	Speed4	Vi Function	Acceleration	÷ Hz	wheel: 1600 ; pulses: 1 ;	
	Ch01	Channel01	Y.		HZ		
	Ch02	Channel02	v Sensor	AiM Accelerometer +/-5	g Hz		
	Ch03	Channel03	Vi Sampling Frequency	20 Hz	₽ Hz		
	Ch04	Channel04	Vi Unit of Measure	g	Hz		
	Ch05	Channel05	V. Display Precision	2 decimal places	₽ HZ		
	Ch06	Channel06	Vi		Hz		=
	Ch07	Channel07	Vi		Hz		
	Ch08	Channel08	V		нz		
	AccX	AccelerometerX	In		HZ		
	AccY	AccelerometerY	L	4 Save	Cancel Hz		
	AccZ	AccelerometerZ	Vertical Accel	AiM Internal Accelerometer	g 0.01 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		

The sensor is set on the desired channel. Press "Transmit".

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All MXG 05 ≫							
Save Save As Close Trans	mit						
Channels ECU Stream CAN2 Stream Math G	Parameters Shift	Lights and Alarms Display Sma	artyCam Stream CAN Expan	isions CAN O	utput		
ID	Name	Function	Sensor	Unit F	req Parameters		
RPM	RPM	RPM	RPM Sensor	rpm 2	0 Hz max: 16000 ; factor: /1	1;	
Spd1	Speed1	Vehicle Spd	Speed Sensor	km/h 0.1 2	0 Hz wheel: 1600 ; pulses:	:1;	
Spd2	Speed2	Vehicle Spd	Speed Sensor	km/h 0.1 2	0 Hz wheel: 1600 ; pulses:	:1)	
Spd3	Speed3	Vehicle Spd	Speed Sensor	km/h 0.1 2	0 Hz wheel: 1600 ; pulses:	:1;	
Spd4	Speed4	Vehicle Spd	Speed Sensor	km/h 0.1 2	0 Hz wheel: 1600 ; pulses:	:1;	
Ch01	Channel01	Acceleration	AIM Accelerometer +/-5 g	g 0.01 2	0 Hz		
Ch02	Channel02	Voltage	Generic 0-5 V	mV 2	0 Hz		