



AIMSHOP.COM



• LAP TIMERS • LOGGERS • CAMERAS • DASHES • SENSORS • AND MORE

SHOP NOW

AiM Infotech

# Car / bike speed sensor Race Studio 2 configuration

Release 1.00

---



VISIT SUPPORT CENTER

SOFTWARE DOWNLOADS | FIRMWARE UPDATES | PRODUCT DOCUMENTATION



# 1 Introduction

When the sensor has been physically connected to one channel of AiM device it is necessary to load it in the device configuration using AiM configuration software . In this datasheet it is loaded using **Race Studio 2** software.

# 2 Configuration with Race Studio 2

To load the sensor in AiM logger configuration:

- run the software
- select the logger in use and the configuration where to load the sensor (in the example EVO4)
- enter "Channels" layer
- if speed channels are enabled you can fill in the related panels highlighted here below.

The screenshot shows the RaceStudio 2.55.56 interface. The 'Channels' tab is selected, and the 'Speed1' and 'Speed2' configuration panels are highlighted with a red box. Below these panels is a table of channel configurations.

Channel identifier	Enabled/disabled	Channel name	Sampling frequency	Sensor type	Measure
RPM	<input type="checkbox"/> Disabled	Engine	10 Hz	Engine revolution speed	rpm
SPD_1	<input checked="" type="checkbox"/> Enabled	Speed1	10 Hz	Speed	km/h .1
SPD_2	<input checked="" type="checkbox"/> Enabled	Speed2	10 Hz	Speed	km/h .1
CH_1	<input checked="" type="checkbox"/> Enabled	Channel_1	10 Hz	Generic linear 0-5 V	V .1
CH_2	<input checked="" type="checkbox"/> Enabled	Channel_2	10 Hz	Zero based potentiometer	mm .1
CH_3	<input checked="" type="checkbox"/> Enabled	Channel_3	10 Hz	AiM 0-100 bar (X05SNP31100R)	bar
CH_4	<input checked="" type="checkbox"/> Enabled	Channel_4	10 Hz	AiM 0-10 bar (X05SNP31010R)	bar
CH_5	<input type="checkbox"/> Disabled	Channel_5	10 Hz	AiM 0-4 bar (X05SNP31004A)	bar
CALC_GEAR	<input type="checkbox"/> Disabled	Calculated_Gear	10 Hz	Calculated Gear	#
ACC_1	<input checked="" type="checkbox"/> Enabled	Lateral_acc	10 Hz	Lateral accelerometer	g .01
ACC_2	<input type="checkbox"/> Disabled	Longitudinal_acc	10 Hz	Longitudinal accelerometer	g .01
ACC_3	<input checked="" type="checkbox"/> Enabled	Vertical_acc	10 Hz	Vertical internal accelerometer	g .01
LOG_TMP	<input checked="" type="checkbox"/> Enabled	Datalogger_Temp	10 Hz	Cold joint	°C
BATT	<input checked="" type="checkbox"/> Enabled	Battery	1 Hz	Battery	V .1
ECU_1	<input checked="" type="checkbox"/> Enabled	RPM	10 Hz	Engine speed sensor	rpm
ECU_2	<input checked="" type="checkbox"/> Enabled	PEDAL_POSITION	10 Hz	Percentage sensor	% .1
ECU_3	<input checked="" type="checkbox"/> Enabled	SPEED_BMW	10 Hz	Speed sensor	km/h .1
ECU_4	<input checked="" type="checkbox"/> Enabled	SPEED2_BMW	10 Hz	Speed sensor	km/h .1
ECU_5	<input checked="" type="checkbox"/> Enabled	WHEEL_SPD_FR_LF	10 Hz	Speed sensor	km/h .1
ECU_6	<input checked="" type="checkbox"/> Enabled	WHEEL_SPD_FR_RH	10 Hz	Speed sensor	km/h .1

- Select the speed channel where to set the sensor on and select "Speed" in "Sensor Type" column as shown here below. Fill in the related panel.

Channel identifier	Enabled/disabled	Channel name	Sampling frequency	Sensor type	Measure
RPM	<input type="checkbox"/> Disabled	Engine	10 Hz	Engine revolution speed	rpm
SPD_1	<input checked="" type="checkbox"/> Enabled	Speed1	10 Hz	Speed	km/h .1
SPD_2	<input checked="" type="checkbox"/> Enabled	Speed2	10 Hz	Speed	km/h .1
CH_1	<input checked="" type="checkbox"/> Enabled	Channel_1	10 Hz	Detonation	V .1
CH_2	<input checked="" type="checkbox"/> Enabled	Channel_2	10 Hz	Revolution speed	mm .1
CH_3	<input checked="" type="checkbox"/> Enabled	Channel_3	10 Hz	ABS speed sensor	
CH_4	<input checked="" type="checkbox"/> Enabled	Channel_4	10 Hz	AiM 0-100 bar (X05SNP31100R)	bar
CH_5	<input checked="" type="checkbox"/> Enabled	Channel_5	10 Hz	AiM 0-10 bar (X05SNP31010R)	bar
CH_5	<input type="checkbox"/> Disabled	Channel_5	10 Hz	AiM 0-4 bar (X05SNP31004A)	bar
CALC_GEAR	<input type="checkbox"/> Disabled	Calculated_Gear	10 Hz	Calculated Gear	#
ACC_1	<input checked="" type="checkbox"/> Enabled	Lateral_acc	10 Hz	Lateral accelerometer	g .01
ACC_2	<input type="checkbox"/> Disabled	Longitudinal_acc	10 Hz	Longitudinal accelerometer	g .01
ACC_3	<input checked="" type="checkbox"/> Enabled	Vertical_acc	10 Hz	Vertical internal accelerometer	g .01
LOG_TMP	<input checked="" type="checkbox"/> Enabled	Datalogger_Temp	10 Hz	Cold joint	°C
BATT	<input checked="" type="checkbox"/> Enabled	Battery	1 Hz	Battery	V .1
ECU_1	<input checked="" type="checkbox"/> Enabled	RPM	10 Hz	Engine speed sensor	rpm
ECU_2	<input checked="" type="checkbox"/> Enabled	PEDAL_POSITION	10 Hz	Percentage sensor	% .1
ECU_3	<input checked="" type="checkbox"/> Enabled	SPEED_BMW	10 Hz	Speed sensor	km/h .1
ECU_4	<input checked="" type="checkbox"/> Enabled	SPEED2_BMW	10 Hz	Speed sensor	km/h .1
ECU_5	<input checked="" type="checkbox"/> Enabled	WHEEL_SPD_FR_LF	10 Hz	Speed sensor	km/h .1
ECU_6	<input checked="" type="checkbox"/> Enabled	WHEEL_SPD_FR_RH	10 Hz	Speed sensor	km/h .1
ECU_7	<input checked="" type="checkbox"/> Enabled	WHEEL_SPD_RR_LF	10 Hz	Speed sensor	km/h .1
ECU_8	<input checked="" type="checkbox"/> Enabled	WHEEL_SPD_RR_RH	10 Hz	Speed sensor	km/h .1
ECU_9	<input checked="" type="checkbox"/> Enabled	STEER_ANGLE	10 Hz	Angle sensor	deg
ECU_10	<input checked="" type="checkbox"/> Enabled	CLUTCH_SWITCH	10 Hz	Raw value	#
ECU_11	<input checked="" type="checkbox"/> Enabled	BRAKE_SWITCH	10 Hz	Raw value	#
ECU_12	<input checked="" type="checkbox"/> Enabled	BRAKE_PRESS	10 Hz	Pressure sensor	bar .1
ECU_13	<input checked="" type="checkbox"/> Enabled	BRAKE_PR_FR_LF	10 Hz	Pressure sensor	bar .1
ECU_14	<input checked="" type="checkbox"/> Enabled	BRAKE_PR_FR_RH	10 Hz	Pressure sensor	bar .1

Transmit the configuration to the logger pressing "Transmit".