AiM Infotech

Car/Bike accelerometer Race Studio 2 configuration

Release 1.00







InfoTech



1 Introduction

When the accelerometer is physically connected to a channel of your device it is necessary to load it in the device configuration using AiM configuration software. In this datasheet it is loaded using AiM **Race Studio 2** configuration software.

2 Configuration with Race Studio 2

To load the sensor in AiM device configuration:

- run the software, select the device (in the example EVO4) choose the configuration the sensor is to be loaded on and enter "Channels" layer
- select the channel where to set the sensor on (in the example channel 2) and select the accelerometer you are using in "Sensor Type" column as shown below.

nee configuration - Domino											_			
(IIII)	System manager													
Racing Data Power	Trans	mt B	Receive	CAN-Net info	Sma	rtyCam Fund setting	tions 💰	Set acquisition system	time					
AIM Sportline	Current configuration													
orld Leader in Data Acquisitio	Installation name	Data logger type	Ecu	Lap Timer	Vehicle name	Availab	le time	Time with GPS	Total frequenc	y Mast	ter frequency	Expansion:	s frequency	Tot. Expansions
	DEFAULT	EVO4 - 5 channels	None - None	Optical	DEFAULT	19.10.2	2 (h.m.s)	8.15.21 (h.m.s)	121 (Hz)	121 ((Hz)	0 (Hz)		0
Analysis														
	Select configuration	Channels System configu	uration Display CAN-Exp	ansions configurator										
	Speed1	Sp	eed2											
Download Data	Wheel circumference	e (mm) 1666 Wł	neel circumference (mm)	1666										
	Pulses per wheel rev	rolution 1 Pui	lses per wheel revolution	1										
			oco per integricionation											
Import SmartyCam microSD Data	Channel identifier	Enabled/disabled	Channel name		Sampling fre	quency	Sensor type			Measure un	nit Lo	ow scale	High	scale
	RPM	Enabled	Engine		10 Hz	-	Engine revolut	tion speed		rpm	0		20000	
	SPD_1	Enabled	Speed1		10 Hz	-	Speed		1	▪ km/h .1	 0.	0	250.0	
Device Configuration	SPD_2	Enabled	Speed2		10 Hz	-	Speed			≤ km/h .1	 0.	0	250.0	
	CH_1	Enabled	Channel_1		10 Hz	-	Generic linear	0-5 V		• V .1	 0.	0	5.0	
	CH_2	Enabled	Channel_2		10 Hz	-	External vertic	al accelerometer		🚽 g .01	0.	00	5.00	
Device Info	CH_3	Fnabled	Channel_3		10 H7	•	Pressure VDO	0 10 bar		~ V.1	 0. 	n	5.0	
	CH_4	Enabled	Channel_4		10 Hz	•	AIRBOX pressu	ure sensor - X05SNAB01		V .1	 0.	0	5.0	
	CH_5	Enabled	Channel_5		10 Hz	•	Distance poter	ntiometer		#	0		5	
Online	CALC_GEAR	Disabled	Calculated_Gear		10 Hz	-	Zero based po	tentiometer		#	0		9	
,	ACC_1	Enabled	Lateral_acc		10 Hz	-	Lambda senso	or BOSCH		g .01	-3	.00	3.00	
	ACC_2	Enabled	Longitudinal_acc		10 Hz	-	Lambda senso	or NGK TL7111W1 - NTK	TC6110	g .01	-3	.00	3.00	
Device <u>C</u> alibration	ACC_3	Enabled	Vertical_acc		10 Hz	-	Gvro	eed sensor		g .01	-3	.00	3.00	
	LOG_TMP	Enabled	Datalogger_Temp		10 Hz	-	External vertica	al accelerometer	N	_ °C	_ 0		50	
	BATT	Enabled	Battery		1 Hz	-	External horiz. Generic linear	accelerometer 0-5 V	13	V .1	5.	0	15.0	
Customize Sensor							Generic linear	0-500 mV						
a castonines <u>D</u> ensor							Generic linear MSI 0-100 psi 4	0-50 mV sensor						
							MSI 0-150 psi	sensor						
Language							SEAT Brake Pro	essure		1				
Language							SEAT Water Te	emperature						
							Water Temp S	uzuki GSXR						
							Status signal	KI OJAK						
							Temp Weber A	ATS 04 (1200 Ohm)						
							AIM Lambda L	agano KM10 LCU-ONE (0.65 - 1.6 lan	nbda)					
							Oil temperatur	re Renault engines						
							Water temp. D	PPS (FR2000)						
aim-sportline.com							Air temp, (FR)	2000)		1 A A A A A A A A A A A A A A A A A A A				





The sensor is set on the desired channel. Transmit the configuration to the device pressing "Transmit".

	📓 System manager												
Racing Data Power	Transn	nt	Receive	CAN-Net info		SmartyCam Func	tions	Set acquisition system	n time				
AIM Sportline	Current configuration												
rld Leader in Data Acquisition	Installation name	Data logger type	Ecu	Lap Timer	Vehicle name	Available	e time	Time with GPS	Total freque	ncy	Master frequency	Expansions	frequency Tot. Expansion
	DEFAULT	EVO4 - 5 channels	None - None	Optical	DEFAULT	19.10.2	2 (h.m.s)	8.15.21 (h.m.s)	121 (Hz)		121 (Hz)	0 (Hz)	0
Analysis		1											
	Select configuration	Channels System confi	guration Display CAN-Exp	ansions configurator									
	Speed1	S	ipeed2										
Download Data	Wheel circumference	(mm) 1666 y	Wheel circumference (mm)	1666									
<u>_</u> onnour outu	Pulses per wheel revo	aktion 1 F	ulses per wheel revolution	1									
	Puises per wrieer revo		uses per wheel revolution	•									
Import SmartyCam microSD Data	Channel identifier	Enabled/dicabled	Channel name		Samplin	n frequency	Sensortime			Mearu	re unit Lov	rcale	High scale
	RDM	Enabled	Engine		10 Hz	rg requercy	Engine revolu	tion speed		mm	0	Jeane	20000
	SPD 1	Finabled	Sneed1		10 Hz	•	Sneed	nonspeed		■ km/h	1 .0.0		250.0
Device Configuration	SPD 2	Fnabled	Speed2		10 Hz	•	Speed			 km/h 	1 0.0		250.0
	CH 1	Enabled	Channel 1		10 Hz	-	Generic linear	r0-5 V		- 0.1	. 0.0		5.0
	CH 2	Enabled	Channel 2		10 Hz	-	External vertic	cal accelerometer		- 0.01	0.00		5.00
Device Info	CH_3	Fnabled	Channel_3		10 Hz	•	Generic linea	r 0-5 V	6	- V 1	∞ 0.0		5.0
	CH_4	Enabled	Channel_4		10 Hz		Generic linear	r0-5 V		1 1	.00		5.0
	CH_5	M Enabled	Channel_5		10 Hz	*	Gear potentio	ometer		#	0		5
<u>O</u> nline	CALC_GEAR	C Disabled	Calculated_Gear		10 Hz	-	Calculated Ge	ear		#	0		9
	ACC_1	Enabled	Lateral_acc		10 Hz	•	Lateral accele	rometer		± g .01	-3.0)	3.00
	ACC_2	Enabled	Longitudinal_acc		10 Hz	*	Longitudinal	accelerometer		• g .01	-3.0	0	3.00
Device <u>C</u> alibration	ACC_3	Enabled	Vertical_acc		10 Hz	*	Vertical interr	nal accelerometer		• g .01	-3.0	0	3.00
	LOG_TMP	M Enabled	Datalogger_Temp		10 Hz	•	Cold joint			*C	• 0		50
	BATT	Enabled	Battery		1 Hz	-	Battery			V .1	5.0		15.0