



Figure 1: Accelerometer

Introduction

The external accelerometer sensor measures the acceleration of the vehicle. This sensor allows generating accurate track maps, it is for car / snow mobile applications and is supported by Evo 3, MyChron 3 Auto, MXL.

Installation notes

- The accelerometer sensor is resistant to shock but can become critical to vibrations. For this reason we suggest You to fix it using a strip of neoprene, slightly pressed between the accelerometer point of installation.
- Make sure that the sensor is not installed too close to heat sources.
- Do not place the sensor near to sources of interference like ignition coils, alternators and plug leads.
- Please install the accelerometer with the sensitive axle perpendicular to vehicle speed as shown in **Figure 2**.





Software



Once the external accelerometer has been installed it is necessary to calibrate it. To do so, please use **Race Studio 2**, the software properly developed by Aim to configure your data logger and analyze stored data.

Race Studio 2

In **Race Studio 2** main window, shown here below, You can choose the instrument where you wish to install the sensor. Once selected the gauge, please press "System manager" button.



Sensor configuration

To set the sensors you have installed on your vehicle, please press "Channels" button in "System manager" main window. The following screenshot appears.

	Configuration		herati				54	COMP OF SHE
	Engori Vertification		and in		1-	0.84	1 101	Other
A Danei Dutke	Owner	Jack	[lenortype]	100.1	iner to	Laper to:	Farm.1	Paran 1
APPE Ended	State	10.00	Ergne revolution speed	199		2000	1.000	200
1 P1 3 Ended	Same J	1074	- Street	104	3.5	250.3	1008.0	1.0
1.99.3 Dealer	Same(),2	10.00	Colorest Colorest				1000.0	
0.0	(Deve,)	10.00	1 Democratik			188	_	
Contraction of the second	Carrel J	- 1212		-2-		100		
CTLS EVENIE	Carrel_2	10.04	a management	- 2	ð	- CE		
COLO DIMENT	Control A	1000	1 Personale	3	-	100		
Contraction of the second	Control 3	1000	1 march 200	- 2-				
and a second	Channel &	1000	a new management	12		144		
Event.	There a	122		-2	-	11		
1.00	- Anno A		Concession of the local division of the loca	1.1	-	-		
in the second				Sec.				
I ALL DOME	. 40.3	10.00	Law a sum units	- 1	10.00	1.00		
14 LOG NY ENGINE	Distratoggie _1mill	1010	Comparing a second second	-	-	100	_	
IS SHIT Stated	Della Y	1148	Section 2. Constant and the section of the section	-	.51	16.0	-	-
	An J An J Seanger, Jean Select				i.	1.00 1.00 16.2		

To set a sensor it is necessary to double-click in the box corresponding to the "Sensor type" column and to the "Ch_x" (where x represents the channel number) row: a menu like the one reported in the previous figure appears. You can choose between 3 different kind of sensors:

- Lateral Accelerometer
- Longitudinal accelerometer
- Vertical external accelerometer

If you have installed the sensor on a car / snow mobile and you wish to create the track map:

select Lateral accelerometer

Once set the correct sensor type, please transmit the configuration to your gauge pressing "Transmit" button.

Calibration

Once the configuration has been correctly transmitted to your gauge, it is absolutely necessary to auto-calibrate the sensor. Please click on "Calibrate" button: the following screenshot appears.

	Configuration come IRCIN_LOSGER		System taxe 21/03 - Richaronki - 32.145
Charts ACE_2 Acc ACE_1 Acc	Caprol case	Janua tao Longitudinal acceleratories Lateral acceleratories	Total To collector To collector anticollector anticollector
Owner to call Owner Dit () Owner Dit () Owner	on Davidiene met,5	Second laps Med rave potentionecter Med rave potentionecter	Jona California lo californi lo californi lo californi

Press "Click here to auto-calibrate all sensors in the list" button (highlighted with a red /blue arrow in the above figure): the software auto-calibrates automatically all sensors reported in the "to be auto-calibrated" box.

Please note: when auto-calibrating the sensor, the car / snowmobile must be in a position parallel to ground

Note: once the sensor has been auto-calibrated, it is necessary to re-transmit the configuration to the data logger, pressing the proper button.



Dimensions

400 [15.7]



Dimensions in millimetres [inches]

Connector details

Pin	Function	Pin	Function	
1	Accelerometer	3	Supply voltage	
2	GND	4	Non connected	



Male binder connector pinout; external view

Specifications

Electrical characteristics	Value
Vertical acc. measure range Vertical accelerometer linearity Accelerometer type	±5 g 1 % of full scale Analogical Mono-axial
Mechanical characteristics	Value