AiM Infotech

Rotary potentiometer for car/bike/kart Race Studio 2 configuration – steering angle

Release 1.00







1 Introduction

This datasheet explains how to install and set up wit Race Studio 2 the rotary potentiometer. AiM loggers can measure the displacement between two points using a sensor (rotary potentiometer) directly connected to the two measure points. This potentiometer can measure the angular displacement like those of the steering wheel.

2 Setup with Race Studio 2

To load the potentiometer in AiM logger configuration:

- run the software, select the logger in use and the configuration to set the potentiometer on and enter "Channels" layer
- Select the channel where to set the potentiometer on (in the example channel 3) and select "Mid zero potentiometer" in "Sensor type" column as shown here below.

| Am Sportine AM Sportine Irrid Carder in Data Acquisition Agalysis Bownload Data Import SmartyCam microSD Data Device Configuration Device Injo | Transm end configuration statistion name godER_CONF lect configuration beed_1 wheel croumference uses per wheel reval hannel identifier PM PD_1 H_1 H_2 | t Data logar type MDL h5TA Danvels System config (mm) 3666 Auton 1 Enabled Frabled Frabled Frabled | Channel name Engine Channel name Engine Spece,1 Channel,1 | CAN-Het refo | Vehicle name READ | SmartyCam Furv setting 9.32 ing frequency | tions 000 time 200 (hm.s) | Set acquisition system time Time with CPS 4 06 35 (h.m.s) | e Total frequency 121 (Hz) | Master 121 (H Measure unit rpm | frequency :;) | Expansions frequency 0 (Hz) le Hig 2000 2000 | Tot. Expansions 0 h scale 20 0 |
|--|---|--|---|-------------------------------------|---|--|---|---|-------------------------------|---|--|--|--|
| AM Sportline Urd Leader in Data Acquisition Aquivis Aquivis Aquivis Device Configuration Device Info CH | evit configuration statistion name isodER_CONF lect configuration _C peed_1 theel croumference ubes per wheel revol hannel identifier PM PD_3 H,1 H,2 | Data logger type MOL PGTA Dranosis System config Auton 1 Enabled F Enabled F Enabled | Ecu None - None austion CAV Expansions Channel name Engine Specd, J. Channel J. | Lab Timer by GPS configurator | Vehicle name READ Sam 10 H 10 H | Avail 9.32 ing frequency | ble time 39 (h.m.s) Sensor type I Engine revoluti I Speed | Time with GPS 4 00.30 (h.m.s) | Total frequency 121 (Hz) | Measure unit | frequency :) Low sca 0 = 0.0 | Expansions frequency 0 (Hz) sle Hig 2000 250. | Tot. Expansions 0 h scale 20 |
| Agalysis Agalysis Agalysis Bownload Data Jimport SmartyCam microSD Data Device Configuration CH Device Injo | talation name IGGER_CONF lect configuration C peed_1 theel croumference ulses per wheel revol hannel identifier PM PD 1 H_1 H_2 H_2 | Data boger type NOL PSTA Disonals System config (mm) 3666 Auton 1 Enabled/disabled F Enabled F Enabled F Enabled | Ecu None - None Austion CAV-Expansions Channel name Engine Spccd_1 Channel_1 | Lao Timer by GPS configurator | Vehicle name READ Sam 10 H 10 H | Avall 9.32 ing frequency | 39 (h.m.s) Sensor type Engine revoluti Speed | Time with GPS 4 06.35 (h.m.s) | Total frequency 121 (Hz) | Mester 121 (H | trequency Low sca 0 = 0.0 | Expansions frequency 0 (Hz) sle Higg 2000 250. | Tot. Expansions 0 h scale 20 0 |
| Agalysis See Download Data Put Import SmartyCam microSD Data CH Device Configuration CH Device Injo CH | IGGER_CONF Intel configuration C peed_1 theel crounference Uses per wheel revol hannel identifier PM PD_1 H_1 H_2 H_2 | MOL PISTA Dranels System config (mm) 2666 Auton 1 Enabled/disabled F: Enabled F: Enabled F Enabled | None - None Austion CAN Expansions Channel name Engine Speed, 1 Channel, 1 | by GPS | REA0 Sam 10 H 10 H | 9.32 ing frequency | Sensor type I Engine revoluti I Specd | 4 00.30 (h.m.s) | 121 (Hz) | Measure unit |) Low sca 0 = 0.0 | 0 (Hz) de Hig 2000 250. | 0 hscale 20 0 |
| Agalysis See Dewnload Data With Import SmartyCam microSD Data Ser Device Configuration CH Device Info | lect configuration C peed_1 theel crounference uses per wheel revol hannel identifier PM PD_1 H_1 H_2 H_2 | Channels System config (mm) 2666 auton 1 Enabled/disabled F Enabled F Enabled F Enabled | Channel name Engine Spece,1 Channel,1 | configurator | Sam 10 H 10 H | ing frequency | Sensor type I Engine revolutis I Speed | tion speed | | Measure unit | Low sca 0 | ıle Hig 2000 250. | th scale |
| Download Data Pu Import SmartyCam microSD Data Device Configuration Device Info | peed_1 theel croumference uses per wheel revol hannel identifier PM H_1 H_2 H_2 | (mm) 2666 Auton 1 Enabled/disabled F Enabled Enabled Enabled | Channel name Engine Specel, J Channel, J | | Sam 10 H 10 H | ling frequency | Sensor type Engine revoluti | tion speed | | Measure unit | Low sca 0 | ile Higi 2000 2501 | h scale X) 0 |
| Devrice Info | hannel identifier PM H_1 H_1 H_2 | (mm) 1666 Auton 1 Enabled/disabled F Enabled F Enabled F Enabled | Channel name Engine Specd_1 Channel_1 | | Sam 10 H 10 H | ing frequency | Sensor type Engine revoluti | tion speed | | Measure unit | Low sca 0 | ile Higi 2000 250 | h scale 20 |
| Device Info | heel orcumerence ulses per wheel revol hannel identifier PM H_1 H_2 H_2 | (mm) 2006 Aution 1 Enabled/disabled IP Enabled IP Enabled IP Enabled | Channel name Engine Specd_1 Channel_1 | | Sam 10 H 10 H | ing frequency | Sensor type Engine revoluti Speed | tion speed | | Measure unit | Low sca 0 0.0 | ile Hig 2000 2501 | h scale 20 |
| Import SmartyCam microSD Data | hannel identifier PM H_1 H_2 H_2 | Auton 1 Enabled/disabled Enabled Enabled Enabled Enabled Enabled | Channel name Engine Speed_1 Channel_1 | | Sam 10 H 10 H | ling frequency | Sensor type Engine revoluti | tion speed | | Measure unit | 0 | ile Hig 2000 250 | h scale 00 |
| Import SmartyCam microSD Data | hannel identifier PM PD_1 H_1 H_2 | Enabled/disabled | Channel name Engine Speed_1 Channel_1 | | Sam 10 H 10 H | ling frequency | Sensor type Engine revoluti | tion speed | | Measure unit | 0 | ale Hig 2000 2504 | h scale 00 |
| Device Info Device | hannel identifier PPM H_1 H_2 | Enabled/disabled | Channel name Engine Spccd_1 Channel_1 | | Sam 10 H 10 H | ling frequency | Sensor type Engine revoluti Speed | tion speed | | Measure unit | 0 | ale Hig 2000 2504 | th scale 00 |
| Device Configuration CH CH Device Info CH CH CH | PM PD_1 H_1 H_2 | Enabled Enabled Enabled Enabled Enabled | Engine Speed_1 Channel_1 | | 10 H 10 H | 2 | I Engine revoluti I Speed | tion speed | | rpm | 0 | 200. | 00 0 |
| Device Configuration CH Device Info CH CH CH CH CH CH | PD_1 H_1 H_2 | Enabled | Speed_1 Channel_1 | | 10 H | 2 | J Speed | | | I have a | -1 0.0 | 250. | .0 |
| Device Configuration CH CH Device Info CH | H1 H2 | Enabled | Channel 1 | | 10.44 | | | | - | a km/n ia | | | |
| Device Info | H_2 | TT Further | | | 10 1 | | d Generic linear (| 0-5 V | | LV L | ±1 0.0 | 5.0 | |
| Device Info | 4.5 | r Enabled | Channel_2 | | 10 H | 3 | Generic linear (| 0-5 V | | L V L | 0.0 | 5.0 | |
| Device Info | 10 | Enabled | Channel_3 | | 10 H | 2 | Generic linear | 0-50 mV | | mV | - 0 | 5 | |
| СН | H_4 | F Enabled | Channel_4 | | 10 H | 3 | Thermocouple | Thermocouple | | V 1 | - 0.0 | 5.0 | |
| | нs | F Enabled | Channel_5 | | 10 H | 10 Hz | Thermoresistance PT100 | | | V.1 | | 5.0 | |
| CH | H_6 | Enabled | Channel_6 | | 10 H | 2 | Temperature V | VDO 40-120 °C VDO 50-150 °C | | V.1 | - 0.0 | 5.0 | |
| Online | H_7 | F Enabled | Channel_7 | | 10 H | 2 | Temperature V | VDO 60-200 *C | | V 1 | ± 0.0 | 5.0 | |
| CH | H_8 | F Enabled | Channel_8 | | 10 H | 3 | Water temp. (CLIO) | | | V 1 | ± 0.0 | 5.0 | |
| CA | ALC_GEAR | T Disabled | Calculated_Gea | | 10 H | 3 | Pressure VDO 0 | 0-2 bar | | | Ó | 9 | |
| Device Calibration AC | CC 1 | Enabled | LatAcc | | 10 H | | Pressure VDO 0 | 0-5 bar | | g .01 | -3.00 | 3.00 | j . |
| LO | DG_TMP | F Enabled | Datalogger_Term | | 10 H | 6 | AIRBOX pressu | ure sensor - X05SNAB01 | | •C | - 0 | 50 | |
| BA | ATT | F. Enabled | Battery | | 1 Hz | 2 | AIRBOX pressu | ure sensor - X055NA800 | | V J | 5.0 | 15.0 | á . |
| | x | | | | | | Lefo based por | ntiometer | | | | | |
| Customize Sensor | | | | | | | Mid zero poter | ntiometer | | | | | |
| | | | | | | | Lambda sensor | WROSCH NOR TO PETRONAL - NOTE T | 106110 | - | | | |
| | | | | | | | Generic linear | 0-5 V | | | | | |

- click out of the cell
- transmit the configuration to the logger pressing "Transmit" on the software top keyboard.



InfoTech

To calibrate the potentiometer:

• Press "Device Calibration"

| vice Configuration Download I | Data Imnort SmartyCam | Data Analysis Devic | relato Online Devic | e Calibration Customi | ze Sensor Language ? | | | | | | | |
|---|--|--|--|-----------------------|---|---|--|--|--|---|---------------------|--|
| | | the reliefts bein | center chinic benc | | count conjunge i | | | | | | - | |
| CODO Data Pasar | Transe | n 6 | Receive | KAN-Net in | fo SmartyC | Cam Functions setting | Set acquisition system time | • | | | | |
| AIM Sportline | Current configuration | | | | | | | | | | | |
| orld Leader in Data Acquisition | Installation name | Data logger type | Ecu | Lap Timer | Vehicle name | Available time | Time with GPS | Total frequency | Master frequency | Expansions frequency | Tot. Expansions | |
| | LOGGER_CONF | MOL PISTA | None - None | by GPS | READ | 9.32.39 (h.m.s) | 4.06.35 (h.m.s) | 121 (Hz) | 121 (Hz) | 0 (Hz) | 0 | |
| A <u>n</u> alysis | Select configuration (Speed_1 | Channels System configu | uration CAN-Expansions of | configurator | | | | | | | | |
| Download Data | Wheel circumference Pulses per wheel revo | (mm) 1666 | | | | | | | | | | |
| Import SmartyCam | | | | | | | | | | | | |
| Import SmartyCam | Character Street | E-shi di fanta d | 0 | | e t t | 6 | | | | | | |
| Import SmartyCam microSU Data | Chennel identifier | Enabled/disabled | Channel name | | Sempling frcq | uency Sensor type | ution mead | Mcase | rc unit Low | scole Hig | h scalc | |
| Import SmartyCam microSD Data | Channel identifier RPM SPD 1 | Enabled/disabled | Channel name Engine Sneed 1 | | Sempling frcq 10 Hz 10 Hz | ucncy Scnsor type Lengine revolu V Speed | lution speed | Mcasu rpm *1 km/b | Incunit Low | scole Hig 2000 | h scolc 10 | |
| Import SmartyCam microSD Data | Channel identifier RPM SPD_1 CH 1 | Enabled/disabled | Channel name Engine Speed_1 | | Sempling freq 10 Hz 10 Hz | ucncy Sensor type Engine revolu Speed Coperio lines | lution speed | Mcasa rpm km/h v_1 | rrc unit Low 0 1 ± 0.0 * 1 0.0 | scole Hig 2000 250 | h scolc 10 0 | |
| Import SmartyCam microSD Data | Chennel identifier RPM SPD_1 CH_1 CH_2 | Enabled/disabled | Channel name Engine Speed 1 Channel 1 Channel 2 | | Sompling freq 10 Hz 10 Hz 10 Hz 10 Hz | ucncy Sensor type T Engine revolu Speed Generic lines Generic lines | lution speed ar 0-5 V ar 0-5 V | Mcasu rpm * km/h * V 1 | rc unit Low 0 1 ≠ 0.0 ± 0.0 + 0.0 | scolc Hig 2000 250. 5.0 5.0 | h scole 10 | |
| Import SmartyCam microSU Data | Channel identifier RPM SPD_1 CH_1 CH_2 CH_3 | Enabled/disabled | Channel name Engine Speed_1 Channel_1 Channel_2 Channel_3 | | Sempling freq 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz | uency Sensor type T Engine revolu Speed Generic lines Generic lines Mid seen pot | lution speed ar 0-5 V ar 0-5 V tentionweter | Mcasu rpm ▼ km/h ▼ V 1 ▼ V 1 | rrc unit Low 0 1 ± 0.0 ± 0.0 ± 0.0 | scolc Hig 2000 250, 5,0 5,0 5,0 5,0 | h scole. 10 0 | |
| Import SmartyCam microSU Data | Channel identifier RPM SPD_1 CH_1 CH_2 CH_3 CH 4 | Enabled/disabled | Channel name Engine Speed_1 Channel_1 Channel_2 Channel_3 Channel_4 | | Sempling freq 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz | uency Sensor type T Engine revolu Speed Generic lines Mid zero pot Generic lines Mid zero pot | ution speed ar 0-5 V ar 0-5 V tentiometer ar 0-5 V | Mcasu rpm = km/h = V 1 = V 1 = V 1 = V 1 | rc unit Low 0 1 × 0.0 × 1 0.0 × 1 0.0 1 × 0.0 | scolc Hig 2000 250. 5.0 5.0 5.0 5.0 | h scolc 10 0 | |
| Import SmartyCam microSU Data | Channel identifier RPM SPD_1 CH_1 CH_2 CH_3 CH_4 CH_5 | Enabled/disabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled | Channel name Engine Speed,1 Channel,1 Channel,2 Channel,3 Channel,4 Channel,5 | | Sempling freq 10 Hz | uency Sensor type T Engine revolu T Speed T Generic lines Mid zero pot C Generic lines Generic lines Generic lines Generic lines Generic lines | ution speed ar 0-5 V ar 0-5 V tentiometer ar 0-5 V ar 0-5 V | Mcasu rpm = km/h = V 1 = V 1 = V 1 = V 1 = V 1 | re unit Low 0 1 × 0.0 1 0.0 1 0.0 1 0.0 1 0.0 -1 0.0 | scole Hig 2000 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 | h scolc 10 0 | |
| Import SmartyCam microSD Data Device Configuration Device Info | Сhannel identifier ВРМ SPD_1 СH_1 CH_2 CH_2 CH_2 CH_4 CH_5 CH 6 | Enabled/disobled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled | Channel name Engine Speed_1 Channel_1 Channel_2 Channel_3 Channel_4 Channel_5 Channel 6 | | Sampling freq 10 Hz 10 Hz | uency Sensor type * Engine revolv * Speed * Generic linea * Mid zero pot - Generic linea * Generic linea * Generic linea * Generic linea | ution speed ar 0-5 V ar 0-5 V tentitionetter ar 0-5 V ar 0-5 V | Mcass rpm v km/h v v 1 v v 1 v 1 v 1 v 1 v 1 v 1 v 1 v 1 | rc unit Low 0 1 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 | scole Hig 2000 250 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5 | h scolc 30 0 | |
| Import SmartyCam microSD Data | Channel identifier RPM SPD_1 CH_1 CH_2 CH_4 CH_5 CH_6 CH_7 | Enabled/disobled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled | Channel name Engine Speed,1 Channel,1 Channel,2 Channel,3 Channel,4 Channel,5 Channel,5 Channel,7 | | 50 Hz 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz | uency Sensor type * Engine revolu- * Speed Generic lines * Mid zero pot Generic lines * Generic lines Generic lines Generic lines Generic lines * Generic lines | lution speed ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V w 0-5 V | Mcasy rpm ¥ km/h ¥ V 1 ¥ V 1 | Inc unit Low 0 1 × 0.0 1 0. | scole Hig 2000 2500 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 | h scolc 30 0 | |
| Import SmartyCam microSU Data Device Configuration Device Info Qnline | Сhennel identifier RPM SP0_1 CH_1 CH_2 CH_3 CH_4 CH_5 CH_6 CH_7 CH_8 | Enabled/disabled F Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled | Channel nome Engine Speed.1 Channel.1 Channel.2 Channel.4 Channel.6 Channel.6 Channel.7 Channel.8 | | 5empting freq 10 Hz 10 Hz | uency Sensor type * Engine revolv * Speed * Generic lines * Mid zero pot * Generic lines * Generic lines | lution speed sr 0-5 V tr 0-5 V tertificmetter tr 0-5 V tr 0-5 V tr 0-5 V tr 0-5 V tr 0-5 V | Mcssy rpm = V 1 = V 1 | I Cunit 1 C | scole Hig 2000 250, 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 | h scolc 30 0 | |
| Import SmartyCam microSU Data Device Configuration Device Info Qnline | Channel identifier RPM SPD_1 CH_1 CH_2 CH_3 CH_4 CH_5 CH_6 CH_7 CH_8 CALC GEAR | Enabled/disabled Ena | Channel name Engine Speed J Channel J Channel 2 Channel 4 Channel 5 Channel 6 Channel 6 Channel 7 Channel 8 Calculated, 6ea | | 5 compling freq 10 Hz 10 Hz | vency Sensortype * Engine revolu * Speed * Generic lines * Generic lines | Vution speed at 0-5 V at 0-5 V at 0-5 V at 0-5 V at 0-5 V at 0-5 V at 0-5 V biot | Mcayu rpm 2 km/h 2 V 1 2 mm 1 2 V 2 2 V 2 2 V 3 2 V 3 | rrc unit Low 0 1 = 0,0 = 0, | scale. Hig 2000 250 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5 | h scolc 30 0 | |
| Import SmartyCam microSU Data Device Configuration Device Info Quiline Device Colligention | Channed identifier RPM SPD_1 CH_1 CH_2 CH_3 CH_4 CH_5 CH_6 CH_6 CH_7 CH_8 CALC_GEAR ACC_1 | Enabled/disabled | Channel name: Engine Speed, 1 Channel, 1 Channel, 2 Channel, 3 Channel, 4 Channel, 5 Channel, 6 Channel, 6 Channel, 7 Channel, 7 Cha | | 5 sampling froq 10 Hz 10 Hz | uency Sensertype Engine revolu- Speed Generic lines Generic lines | bution speed ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V w 0-5 V w 0-5 V w 0-5 V isoar isoarter | Mcsy rpm 2 ForM 2 V 1 2 | rr unit Low 0 1 = 0.0 = 0.0 1 = 0.0 1 = 0.0 = | scale. 14ig 2000 2000 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 | h scolc 0 | |
| Import SmartyCam microSU Data | Channel identifier RPM SP0_1 CH_1 CH_2 CH_4 CH_5 CH_6 CH_7 CH_8 CALC_0EAR ACC_1 LO0_TMP | Enabled/disabled F Enabled F Enabled | Channel name: Engine Speed,1 Channel,1 Channel,2 Channel,4 Channel,5 Channel,5 Channel,7 Channel,8 Calculated,Gea LatAcc Datalogger,Tem | | 5empting freq 10 Hz 10 Hz | uency Sensor type Engine revolu Speed Generic lines Generic lines | Ution speed ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V ar 0-5 V or 0-5 V or 0-5 V icer errometer | Mcay rpm 2 Wr/h 2 V 1 2 W 1 2 V 1 2 | rrc unit Low 0 1 7 00 1 000 | scale: 14ig 2000 2000 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 | h scolc 30 0 | |

Calibration panel shows up:

Press "Calibrate" button of "Mid zero potentiometer"

| and | System manager | | | | | | | | | | | | | |
|---------------------------------------|--|------------------------|---------------------------|--|--------------------|-----------|----------------------------|-------|--|-----------------|-------------|-------------|--------------------|--------------------|
| Data g Bata Pawer | Tranar | et 🛛 | Receive | CAN | l Net info | Smar | tyCam Functions setting | 0 | Set acquisition system time | | | | | |
| AIM Sportline | Current configuration | | | | | | | | | | | | | - |
| orld Leader In Data Acquisition | Installation name | Data logger type | Ecu | Lap Timer | Vehic | le name | Available time | _ | Time with GPS | Total frequency | / Maste | r frequency | Expansions frequen | cy Tot. Expansions |
| Analysis | Select configuration | Channels System cont | igunation CAN-Expansion | s configurator | 1000 | | and the format | , | a de las (sinta) | 4.1 (14) | 161.0 | | (04) | |
| Develop 4 Date | Speed_1 Wheel circumference | (mm) 1666 | Sensor calibration | | | | | | - | | | | | |
| Download Data | | 1 | - | Configuration nar | ne | | | Syste | en type | | | | | |
| 1 | Pulses per wheel revo | auton 1 | 1 | LOGGER_CON | | | | MXL | PISTA | | | | | |
| Import SmartyCam microSD Data | Channel identifier | Enabled/disabled | Sensors to autocalibr | ale | | | | 1 | | | Measure | Im | cale is | linh scale |
| | RPM | Enabled | | | | | | | Click here to autocalibrate sensors in the list | zal | measure uni | 0 | 2 | 0000 |
| | SPD 1 | Finabled | | | | | 1 | 1.00 | | | *1 km/h_1 | *l no | , | 50.0 |
| Device Configuration | CH1 | F Enabled | Channel | iname | Sensor | type | Status | Ch | ck here to calibrate | | • V 1 | -1 0.0 | 5 | 0 |
| | CH 2 | Finabled | LatAcc | L | ateral acceleromet | er | Calibrated | _ | Calibrate | | - V 1 | -1 0.0 | 5 | 0 |
| | CH 3 | Finabled | | | | | | | | | mm 1 | -1 6.0 | 5 | 0 |
| Device Info | CH 4 | Enabled | | | | | | | | | - VI | - 0.0 | 5 | .0 |
| Device Injo | CH 5 | Enabled | | | | | | | | | -1 v 1 | -1 0.0 | 5 | 0 |
| | CH 6 | Frabled | Concerns to another to | | | | | | | | -1 v 1 | -100 | 5 | 0 |
| Online | CH 7 | F Enabled | Jeriours to Calcrate | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | | 110000 | 1 | | | - | -lv1 | -100 | 5 | 0 |
| Quinta | CH 8 | F Enabled | Channel | name | Sensor | type | Status | Ch | ck here to calibrate | | · v 1 | -100 | 5 | 0 |
| | CALC GEAR | C Disabled | Channel_3 | - M | lid zero potention | seter | Default value | • | Calibrate | | | 0 | 9 | |
| Davies Calibration | ACC 1 | Enabled | | | | | | _ | | | g .01 | -3.00 | 3 | .00 |
| Device Landration | LOG TMP | F. Enabled | | | | | | | | | *C | -10 | 5 | 0 |
| | BATT | E Enabled | | | | | | | | | V.1 | 5.0 | 1 | 5.0 |
| | Contract of Contra | Charles | | | | | | | | | | | | |
| Customize Sensor | | | | | | | | | | _ | | | | |
| | | | | | | | | | | | | | | |
| | | | | _ | V Transmit ci | sibration | | Çanor | | | | | | |
| Language | | | | _ | | _ | | _ | | | | | | |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |
| aim-sportline.com | | | | | | | | | | | | | | |



The software shows "Calibration panel" to learn the three calibration points:

• manually fill in values corresponding to the three angular position: for example 90, 0 and -90.



 swerve to the right according to the angle you wish to calibrate and press "Get raw value" corresponding to "High position"

| | System manager | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------------------|----------------------|--------------------|---|--|---|---------------------|-------------|-----------|------------------|----------------------|-----------------|--|--|--|--|--|
| Dating Data Press? | Transmit Rece | | | J Receive CAN-Net info | | SmatyCam Functions | | em time | | | | | | | | | |
| AIM Sportline | Current configuration | | | | 1 | | | | | | | | | | | | |
| world Leader in Lista Acquisition | Installation name | Data logger type | Ecu | Lap Timer | Vehicle name | Available time | Time with GPS | Total fre | quency I | laster frequency | Expansions frequency | Tot. Expansions | | | | | |
| - | LOGGER_CONF | MOL PISTA | None - None | by GPS | READ | 9.32.39 (h.m.s) | 4.06.35 (h.m.s) | 121 (Hz) |)! | 21 (Hz) | 0 (HZ) | 0 | | | | | |
| Analysis | Celest confinention | Questo Sustan cost | entre I CAN Den | antines ender etter | | | | | | | | | | | | | |
| | over compraint | Charnes system con | Control Control | Sensor calibration | | | × | | | | | | | | | | |
| | Speed_1 | | Sensor calibration | | | | | | | | | | | | | | |
| Download Data | Wheel circumference | te (mm) 1666 | | Channel Name | | Sensor type | Measure unit | | | | | | | | | | |
| | D less per ubsel re | unistan 1 | | Channel_3 | Mid ze | ro potentiometer | deg 1 | | | | | | | | | | |
| | Tubes por sincore | | 100 | | | | | | | | | | | | | | |
| Import SmartyCam microSD Data | Channel identifier | Enabled/dicabled | Sensors to au | | | Raw data | Measure | | Maxing | und four | ccale Ma | herale | | | | | |
| | ROM | Enabled/disabled | | | Current values | 0 | -100.0 | altrate all | ivieasur | e unit Low s | scale Plig | as scale | | | | | |
| | 500.1 | F Enabled | 1 | | 1922/0263635 | | LOAD I | 1.77 | TI km/h 1 | 100 | 2004 | 0 | | | | | |
| Davies Configuration | CH 1 | I Enabled | C | | Cet Day Mar | 4097 | 00 | | *I v 1 | *100 | 50 | <u>.</u> | | | | | |
| Device Configuration | CH1 | Franklad | LatAcc | High Position | T Get Haw value | | 30 | | 1141 | 100 | 50 | | | | | | |
| | CH 2 | Frankled | | ZERO POSITION | Get Raw Value | 1493 | 0 | | al des 1 | -100 | 50 | | | | | | |
| | Crt S | F Enabled | | | 0 | | 1.55 | | _ oeg 1 | - 0.0 | 50 | | | | | | |
| Device Info | CH_4 | Frabled | | LOW POSITION | Get Raw Value | 0 | -90 | | | -100 | 5.0 | | | | | | |
| | 00 | M Enabled | | | | | | | - V 1 | - 0.0 | 5.0 | | | | | | |
| | CH_6 | M Enabled | Sensors to ca | - How to o | albrate your sensor; | | | | LVL | | 5.0 | | | | | | |
| Quline | CH_7 | Finabled | c | 1- Maintain your sensor is | 1. Maintain your assess in high (or orbit) reference position and click on click raw values proper | | | | | - 0.0 | 5.0 | | | | | | |
| | CH_S | Enabled | Channel 3 | button. | | | and an and a proper | | -1V.1 | .0 I≛ | 5.0 | | | | | | |
| | CALC_GEAR | Disabled | | 2 - Maintain your sensor is | zero (or rest) reference posi | ion and click on <g< td=""><td>t raw value> proper</td><td>r 🗆</td><td></td><td>0</td><td>9</td><td></td></g<> | t raw value> proper | r 🗆 | | 0 | 9 | | | | | | |
| Device Calibration | ACC_1 | F Enabled | | button. | | | | | g .01 | -3.00 | 3.00 | (| | | | | |
| | LOG_TMP | Enabled | | 3 - Maintain your sensor in | low (or left) reference position | n and click on «Get | raw value> proper | | *C | - 0 | 50 | | | | | | |
| | BATT | F Enabled | | button. | | | | | V 1 | 5.0 | 15.0 | | | | | | |
| Customize Sensor | | | | 4 - Insert measure values | correspondent to above inde | cated reference post | iona. | | | | | | | | | | |
| a contract general | | | 1.1 | Click «OK» button. | | | | | | | | | | | | | |



- place the steering in its zero position and press "Get raw value" corresponding to "Zero position" (image below on the left)
- swerve to the left according to the angle you wish to calibrate and press "Get raw value " corresponding to "Low position" (image below on the right)

| | Current values | Raw data 2500 | Measure 0.0 | | Current values | Raw data 4113 | Measure 64.5 |
|---------------|----------------|------------------|----------------|---------------|----------------|------------------|-----------------|
| HIGH POSITION | Get Raw Value | 0 | 90 | HIGH POSITION | Get Raw Value | 0 | 90 |
| ZERO POSITION | Get Raw Value | 2500 | 0 | ZERO POSITION | Get Raw Value | 2500 | 0 |
| LOW POSITION | Get Raw Value | 0 | -90 | LOW POSITION | Get Raw Value | 0 | -90 |

• press OK

When calibration is over potentiometer status will turn to "Calibrated" and become red:

• Transmit the calibration to the logger pressing "Transmit Calibration"

| (MIN) | 🕎 System manager | | | | | | | | | | | | | | |
|-----------------------------------|-----------------------|--------------------------|-----------------------------|--------------------------------|----------------------|--------------------------------|-------|---|--------------|----------|-----------------|----------------------|-------------------|--|--|
| Pasing Data Preser | Tran | et i | Receive | 💋 CAN Net ird | • | SmartyCam Functions setting | 0 | Set acquisition system time | | | | | | | |
| AIM Sportline | Current configuration | | | | | | | | | | | | | | |
| fortid Leader In Data Acquisition | Installation name | Data logger type | Ecu | Lap Timer | Vehicle name | Available time | | Time with GPS | Total freque | ncy Ma | ister frequency | Expansions frequence | y Tot. Expansions | | |
| Analysis | Select configuration | Channels System config | uration CAN-Expansions co | figurator | HEAU) | 9.36.39 (R.M.S. | , | 4.00.30 (t.m.s) | ter (ne) | 14 | (nz) | e (ne) | | | |
| Download Data | Wheel croumference | : (mm) 1666 | sensor calibration | Conferentian annua | | | 0.4 | | 10.00 | | | | | | |
| 2 Download Data | D date per ubail ra | 1 | | Configuration name System type | | | | | | | | | | | |
| | Puses per wheel rev | | | bodden_com | | | MAC. | riain | - 1 | | | | | | |
| Import SmartyCam microSD Data | Channel identifier | Enabled/disabled | Sensors to autocalibrate | | | | [| | | Measure | unit Low | scale H | ioh scale | | |
| | RPM | Enabled | | | | | | Click here to autocalibra sensors in the lat | ne al | rpm | 0 | 20 | 000 | | |
| | SPD 1 | F Enabled | Churcher | | | | 100 | di bassi sufficiente | _ | 1 km/h 1 | · 0.0 | 25 | 0.0 | | |
| Device Configuration | CH1 | F Enabled | - Unannei nar | ne . | sensor type | Calibrated | Co | Collicate | | · V 1 | 0.0 ك | 5/ | 0 | | |
| | CH 2 | Enabled | Labore | Lateral a | celeromeser | Calibrated | - | Calibrate | | -IV 1 | -1 0.0 | 5/ | 0 | | |
| | CH 3 | Enabled | | | | | | | | - deg 1 | 0.0 | 5. | 0 | | |
| Device Info | CH_4 | Enabled | | | | | | | | - V 1 | -1 0.0 | 51 | 0 | | |
| | CHS | Enabled | | | | | | | _ | -1 V 1 | 0.0 | 5/ | D | | |
| | CH 6 | Enabled | Sensors to calibrate | | | | | | | -1V1 | ± 0.0 | 5/ | 0 | | |
| Online | CH_7 | F Enabled | | 226 | 11201012010 | 1 - 0 - 2000 | 11.00 | 10000000000000000000000000000000000000 | | - V 1 | 0.0 | 5/ | 0 | | |
| , 1 | CH_8 | F Enabled | Channel nar | ne | Sensor type | Status | | ck here to calibrate | | · V 1 | ± 0.0 | 51 | D | | |
| | CALC_GEAR | C Disabled | Channel_3 | Mid zero | potentiometer | Calibrated | | Calibrate | | | 0 | 9 | | | |
| Device Calibration | ACC_1 | F Enabled | | | | 1.000 | | | | g .01 | -3.00 | 3, | 00 | | |
|) bornee <u>D</u> anarasan | LOG_TMP | F. Enabled | | | | | | | | *C | -1 0 | 50 | | | |
| | BATT | E Enabled | | | | | | | | V 1 | 5.0 | 15 | a | | |
| Customize Sensor | 1000 | | | | | | | | | | | | | | |
| , contained genuar | | | | | | | | | | | | | | | |
| | | | | 1 | Transmit calibration | | Cance | - | | | | | | | |
| Language | | | | - | | 13 | | | | | | | | | |
| Landoodo | | | | | | | | | | | | | | | |
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