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 the rotary potentiometer with AiM loggers. 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.

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

- Press "Device Calibration"

Calibration panel shows up:

- Press "Calibrate" button of "Mid zero potentiometer"
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"
• 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)

![Image of steering calibration process]

• press OK

When calibration is over potentiometer status will turn to "Calibrated" and become red:
• Transmit the calibration to the logger pressing "Transmit Calibration"