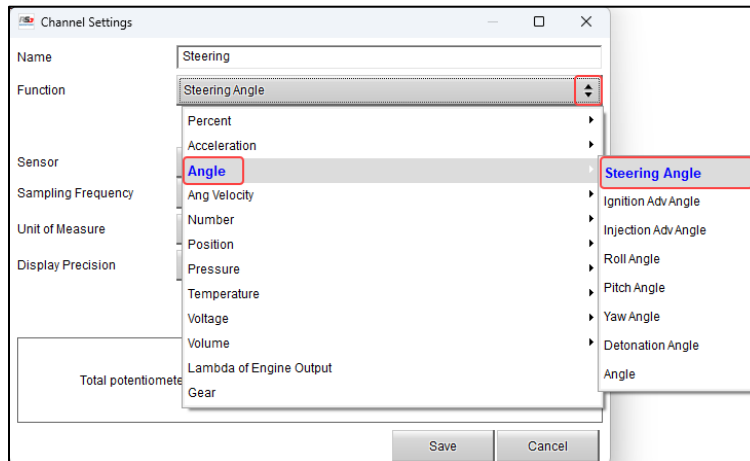


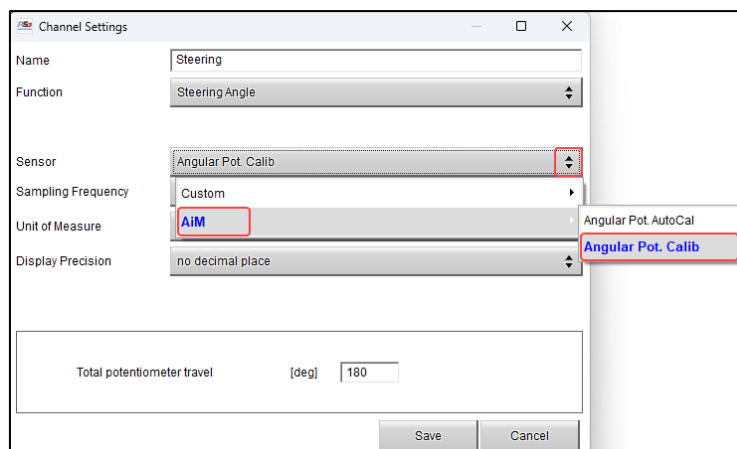
Setting Up and Calibrating a Steering Wheel Position Sensor in Race Studio 3

Select the Analog Channel you have the sensor attached to and name the channel **Steering**, **Steer** etc.

Then click on the Function pulldown box. Select **Angle** and then **Steering Angle**



Next click on the Sensor pulldown box. Select AiM and then **Angular Pot. Calib**



Set the Sampling Frequency. I suggest **20 Hz**.

Set the Unit of Measure. I suggest **deg**.

Set the Display Precision. I suggest **no decimal place**.

Finally, set the Total potentiometer travel to [deg] **180**.

To finish the Channel settings, click on the **Save** button.

Transmit the configuration to the logger by clicking on the **Transmit** button.



After getting the Channel settings correct and transmitted to the logger, go to **Live Measures** and click on the **Calibrate** button and select the **Steering** sensor from the list.

AIM MXm (USB)

Live Measures

Data Download

WiFi and Properties

Settings

Tracks

Predictive Reference Lap

Counters

Logo

Firmware

mV

Search ANY of

Master

Throttle

Steering

LongitudinalAcc

-0.00 g

LateralAcc

-0.00 g

VerticalAcc

-1.00 g

Steering

0 deg

RollRate

-0.2 deg/s

PitchRate

1.3 deg/s

YawRate

0.4 deg/s

Fuel Pressure

76.7 psi

Oil Pressure

-9.0 psi

RPM

0 rpm

LR Speed

0.0 mph

RR Speed

0.0 mph

LoggerTemp

90.8 F

External Voltage

12.2 V

Luminosity

0.49 %

Calculated channels

GPS InlineAcc

0.00 g

GPS LateralAcc

0.00 g

GPS Yaw Rate

0.0 deg/s

PreCalcGear

#

Low Oil Pressure

OFF

Low Volts

OFF

Low Voltage

S0

On Track

S0

StartRec

0 #

Rear Spd Avg

0.0 mph

Predictive Time

--

Ref Lap Diff

--

Rear Speed Total

0.0 mph

GPS Date

2025 y 07 m 24 d

GPS Hours

23:15:23.920

GPS Time

429323920 - 2376

Time - UNIX Time

1753398923 s

Time - UTC Time

1437434123 s

The first thing to do on this screen is set the values you want your Steering position sensor to display, and I suggest -180 and 180 degrees. I have set Point A to **-180%** and Point B to **180%**.

Next you need to make sure the Steering wheel is centered to start and then turned ½ turn (or -180 degrees) to the left and press on the **Set Point A** button.

Then turn the Steering wheel back to center and then turn ½ turn (or 180 degrees) to the right and press on the **Set Point B** button.

Then click on the **Save** button.

AIM MXm (USB)				
Live Measures	Data Download	WiFi and Properties	Settings	Tracks
Predictive Reference Lap	Counters	Logo	Firmware	
Steering				
Reverse Set Point A Set Point B Save Abort				
Move 'channel' to two positions (Points A and B). Click 'Save' to confirm calibration.				
2255 mV : 179 deg				
Point A Point B				
-180 deg	180 deg			
2746 mV	2254 mV			



Then as a final check, while still in the Live Measures function, turn your Steering wheel and watch the Steering value on the RS3 screen and check to make sure that the values match the amount you are turning the Steering wheel. Here the Steering wheel was turned left and displayed -78 degrees.

Here I have clicked on the Steering value in the Live Measures function, and it is highlighted and displayed along the right edge of the screen and easier to view specific channels in the Live Measures function.

AIM MXm (USB)			
Live Measures Data Download WiFi and Properties Settings Tracks Predictive Reference Lap Counters Logo Firmware			
mV Search ANY of			
Master		Steering	
Throttle	0 %	LongitudinalAcc	-0.00 g
LateralAcc	-0.00 g	VerticalAcc	-0.99 g
Steering	-78 deg	RollRate	-0.2 deg/s
PitchRate	1.1 deg/s	YawRate	0.4 deg/s
Fuel Pressure	77.0 psi	Oil Pressure	-9.0 psi
RPM	0 rpm	LR Speed	0.0 mph
RR Speed	0.0 mph	LoggerTemp	91.0 F
External Voltage	12.2 V	Luminosity	0.55 %
Calculated channels			
GPS InlineAcc	0.00 g	GPS LateralAcc	0.00 g
GPS Yaw Rate	0.0 deg/s	PreCalcGear	#
Low Oil Pressure	OFF	Low Volts	OFF
Low Voltage	S0	On Track	S0
StartRec	0 #	Rear Spd Avg	0.0 mph
Predictive Time	--	Ref Lap Diff	--
Rear Speed Total	0.0 mph	GPS Date	2025 y 07 m 24 d