

Software - Internal build / Simplified Ui version.

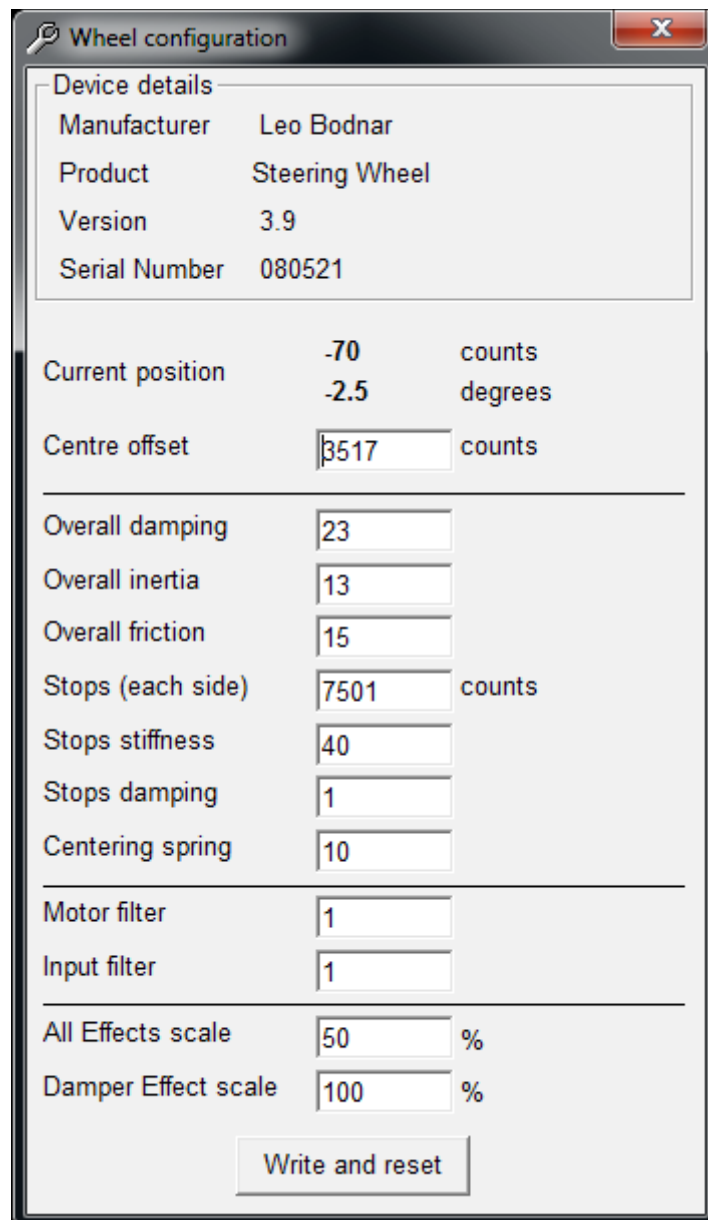
The SimSteering system configuration software is available to download from:
<http://www.simsteering.com/downloads.html>

The software writes settings directly to the steering system memory and also the Windows registry. The internal settings are saved inside the wheel so if you disconnect the USB cable from the PC you do not have to set up the system again. If the system is moved to another PC the settings in the wheel are kept however the new computer will need to know wheel range settings. You can do this by opening the SimSteering software and clicking the write settings button or by using DiView or the Windows calibration utility.

First Time Use

Ensure the system is connected to the PC with the USB cable and the cables to the motor and the emergency stop button are also connected. The motor should also be mounted securely.

- x **If installing a wheel to the shaft clamp for the first time please read the following instructions.**
Download and install the SimSteering Configuration software from the link above. Fit the shaft clamp adaptor to the shaft and then open the SimSteering configuration software. Your steering wheel with the top positioned at 12 o'clock (0 degrees) should be installed to the shaft clamp as close to the motor centre position (0 counts/degrees) as possible. You can see the position of the shaft changing in the top right of the window shown as counts (positions) and degrees when the shaft is rotated.



The screenshot shows a window titled "Wheel configuration" with a search icon and a close button (X). The window is divided into several sections:

- Device details:**
 - Manufacturer: Leo Bodnar
 - Product: Steering Wheel
 - Version: 3.9
 - Serial Number: 080521
- Current position:** -70 counts, -2.5 degrees
- Centre offset:** 3517 counts
- Overall damping:** 23
- Overall inertia:** 13
- Overall friction:** 15
- Stops (each side):** 7501 counts
- Stops stiffness:** 40
- Stops damping:** 1
- Centering spring:** 10
- Motor filter:** 1
- Input filter:** 1
- All Effects scale:** 50 %
- Damper Effect scale:** 100 %

At the bottom of the window is a button labeled "Write and reset".

Current position

This is the current position of the motor in degrees. 0 Degrees should be top dead centre (wheel straight)

Adjusting the Center Offset

Hold the wheel physically at 0 deg (top pointing to 12 o'clock) and take note of the number of counts the wheel alignment is out by (if any). The value is displayed at the top right of the window. Enter this value in the Centre Offset field. This can be a positive or negative value.

Overall Damping

This value is used to simulate real life damping found within the steering mechanism and tyres of the vehicle. The value can vary depending on different hardware and software setups and can also be used to reduce oscillation.

Overall Inertia

This is the rotational inertia feeling of the steering wheel. A higher number will give a higher feeling of inertia, lower number will give a more direct and responsive steering feeling.

Overall Friction

This is used to simulate the friction of the steering column, similar to adding drag to the system. A higher number will give a stiffer steering column feeling, lower number will give a more direct and responsive steering feeling.

Stops (each side)

The overall rotation in counts – ie steering lock. A higher number will give a higher number of turns from one steering lock to steering lock. This number will change depending on what motor is connected.

Stops Stiffness

How stiff or hard the electric end stops are on the steering system. Higher number will be harder end stops.

Stops Damping

How much damping is applied to the end stop force. Lower numbers will feel softer, higher numbers will make the steering wheel bounce when against the end stops.
Recommended value between 1 and 5

Centering Spring

Adds an artificial return to centre type spring. Useful for tuning out dead spots around the centre point of the steering or providing some feedback for very old non FFB enabled games.
0 is completely off – 50 is recommended maximum value.

Motor Filter

The motor filter increases the sharpness of the motor response. The higher the number the more responsive the feeling of the motor. This can cause oscillations and rapid vibrating of the motor if too high a number is used.
1 is completely off – 100 is recommended maximum

Input Filter

The input filter smooths the force feedback coming from the simulation output. It converts step changes in FFB into a smoother more refined signal. Useful for older simulation titles with a low update rate, below 100 Hz.
1 is completely off – 200 is recommended maximum

All Effects Scale

This is the overall percentage of force effects strength. This can be very useful to limit the strength in certain software eg. 100% shown in simulation software would actually be 50% if changed here. NOTE: We recommend setting this below 50% until you are used to the system.

Damper Effect Scale

Reduces the damping coming from the input, simulation software. Useful if the damping is non adjustable in the simulation software.

0 – 100% Recommended to leave at 100% and set the damping in game.