Software

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.

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 software also shows a rotating steering wheel to represent the motor shaft position and a green indicator will turn on to suggest the best position to mount the wheel. If the indicator is red, do not fit the wheel.

SimSt	teering configuration	_ 🗆 🗙
ile <u>H</u> elp		
Device details	Settings	
Manufacturer: Leo Bodnar	Current position	0 Counts
Product: Steering Wheel		0 Degrees
Version: 3.2		
Serial: 080511	Wheel angle	540 Degrees
	Center offset	0 Counts
Functions	Overall damping	20 (0-150)
Center calibration		
Apply defaults	All effects scale	/6 %
Apply defaults	Game damping	100 %
	Inertia	44 %
	Friction	36 %
	Advanced settings	
	Stops stiffness	40 (1-100)
	Stops damping	4 (1-10)
SimSteerin		
	Restore	Apply

(note: The settings shown above are an example only; they are not default settings. Press the 'Apply Defaults' button to write the default/factory settings to the wheel.)

Wheel Angle

This is the amount in degrees you wish the wheel lock to be set. Chose the desired max degrees of rotation and enter it into the Wheel Angle field. This is the total angle of both sides, ie -180 to +180 = 360 deg.

Adjusting the Center Offset

Automatic version - Press the center calibration button on the left side. A window will appear asking to you to hold the wheel physically at 0 deg (top pointing to 12 o'clock) and the press the OK button. *Manual Version* - 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.

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.

Game Damping

Most simulation games have their own adjustable damping settings. The slider here can be used to reduce damping commands sent to the wheel by simulator software that does not have the option to reduce this itself. It is recommended to leave this at 100%.

Advanced Settings

The stops stiffness and stops damping values relate to the forces felt when the wheel reaches the electronic stops set in the wheel angle field to simulate the end of the steering rack travel.

Restore Button

If you want to revert the changes you've made to the settings click the Restore button.

Apply

Once you have are happy with you entered settings click the Apply button.

Center Calibration

(see Adjusting the Center Offset box above)

Apply Defaults

Clicking this button applies the standard factory settings back to the system.

Saving Profiles

Save wheel setting profiles by clicking File, Save settings to file. This creates a SimSteering config (.SSC) file which you can save anywhere on your PC. You can then apply these settings by double clicking the icon which automatically opens the SimSteering software, writes the settings to the wheel for that profile and closes. Multiple profiles can be made for various cars, tracks and games.