



[shiftpointdesign.com](http://shiftpointdesign.com)  
reddit u/clvnng

## Introduction

Thanks for downloading my pdf instructions on how to build your own racing simulator rig. I hope you enjoy your build as much as I did. All materials are easy to purchase from your local hardware store as well as tools you are already familiar with. I look forward to seeing your pictures when you are done, instragram or twitter #opensimrigs.

You will find the wheel mount on this rig very stiff compared to other off the shelf products. Having a stiff wheel mount provides less dampened force feedback at the wheel as well as more accurate steering inputs. I've done previous builds using metal as well as considered a welded version but wood is what I've always gone back to. Metal variations were tough to assemble, as well as expensive. Wood is light, stiff and easy to work with which is why I've chosen this material. This also makes it easier to pass on DIY instructions to you!

As you can see in some of the pictures, I have added speaker mounts as well as rearranged the pedals for easier heal and toe. With a bit of creativity button boxes (<http://www.derekspearsdesigns.com>) and extra displays (<http://www.sensadigit.com/>) can easily be add as well.

In this package I have provided:

- PDF guide with construction dimensions
- Package of high quality photos
- 3D model on a 3D Google software Sketchup (Free Download: <http://www.sketchup.com/>)

Sketchup takes a bit of a learning curve to navigate through but go through some YouTube tutorials, like <http://mastersketchup.com/>, and you will be an expert in no time. Components are nested together so you can hide and show whatever you want. After you open the file in Sketchup go to Windows>Outliner to show and hide the components you want and measure out the dimensions using the measuring tool.

Also, please feel free to contact me if there are missing dimensions or you need some guidance during assembly. I look forward to seeing you on the sim tracks!

## Design and Assembly

### Material and Tools

- 2X4's (Total Length 17.5m or 56ft)
- Plywood or MDF for horizontal pedal mount
- Circular Saw / Mitre Saw / Table Saw / Hand Saw
- Protractor
- Measuring Tape
- Electric Drill / Screw Driver

I used Cedar 2X4's in this project to give it a more aesthetically pleasing look without having to paint and my tool of choice was a Mitre Saw and an Electric Drill.

Dimensions can vary depending on height, steering wheel, pedals, seat dimension, monitors mounts, and monitors. Please test fit while assembling to ensure comfortable fit.

#### Design Dimensions for

- 5'5" 170lbs Male
- Logitech G25/G27
- IKEA Children POANG chair (IKEA Article Number: 101.165.52)
- Cheetah Articulating Arm Monitor Mount / Wall Mount (Available at Amazon)
- 3 X LG IPS 27" Monitors

Locations and lengths of wood screws are not identified in the 3D drawings. Please use your own judgement on where to locate screws. I provide a bunch of pictures to show exactly where the screws are located. Some locations required pre drilled guide holes to ensure the wood wouldn't split, and pre drilled holes to shorten the length of required wood screw.

- Mounting Logitech G25/27 pedals use M6X1 bolts (6mm with a thread pitch of 1)
- I used a nut and bolt for the monitor mount (see pictures), so I can disassemble it to fit through doorways and for transportation if necessary.

Please perform at your own risk. Like any other do-it-yourself / DIY project, using tools can be dangerous. Improper assembly could result in bodily injuries or property damage. I am not responsible for any injury or damage resulting in the use of these instructions.





































