

# Racing Car Simulator





### **Wheel, Pedals & Gears**

Logitech G25 Racing Wheel

### **Speakers**

Logitech Z-5500 Digital 5:1 Surround

### **Display**

19" BenQ LCD 1280 x 1024

### **PC**

Bits and pieces...Technika Optical mouse, KeySonic ACK-3400U Ultra-compact Mini Keyboard, Logic3 four port USB hub.

### **Instrument Cluster**

Porsche 996

### **Handbrake**

Porsche Cayenne

### **Seat**

Corbeau Forza Sport

### **Belts**

3 point RJS Racing Equipment Harness

## **Gear indicator**

7 segment display and led Rev counter

<http://nlp.fi.muni.cz/~xkadlec/lfs/gi/>

## **Instruments**

Milford Instruments Serial Servo-8 Driver Board (1-904)

<http://www.milinst.com/animatronics/animatronics.htm#servodrivrs>

6 servos installed in the cluster. Currently using speed, revs, fuel and the oil pressure gauge for the boost. Voltage and Temp not driven.

## **Warning Indicators**

Velleman USB Experimenters Board VM110

<http://www.quasarelectronics.com/vk8055.htm>

Used to switch leds for ignition, turn x 2, main beam and a change gear.

## **LCD Display**

Mirrorbow Electronics USB Display 4x20

<http://www.mirrorbow.com/usbdisplay.htm>

Work in progress, displays car info, mileage on different screens selected with a pushbutton in the instrument cluster.

## **Switrcches**

BU0836A Ultra Precision Joystick Controller

<http://www.leobodnar.com/products/BU0836A/>

Horn and Starter large push buttons, traction control and pit lane speed limiter small push buttons, turn and main beam momentary toggle switches. The instrument lights are controlled with another toggle switch. The handbrake has a 1k ohm pot to detect position.

## **Software**

AutoHotKey used to start the following apps and map the indicator switch to a key press.

<http://www.autohotkey.com/>

Visual Basic 6 Home developed app to drive all the hardware with Outgauge.

Live for Speed LFS S2, version Z