

Materials List for:

# Experimental Methods to Study Human Postural Control

Pouya Amiri<sup>1</sup>, Abolfazl Mohebbi<sup>1</sup>, Robert Kearney<sup>1</sup>

<sup>1</sup>Department of Biomedical Engineering, McGill University

Correspondence to: Pouya Amiri at [pouya.amiri@mail.mcgill.ca](mailto:pouya.amiri@mail.mcgill.ca)

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## Materials

Name	Company	Catalog Number	Comments
5K potentiometer	Maurey	112P19502	Measures actuator shaft angle
8 channel Bagnoli surface EMG amplifiers and electrodes	Delsys		Measures the EMG of ankle muscles
AlienWare Laptop	Dell Inc.	P69F001-Rev. A02	VR-ready PC laptop
Data acquisition card	National instruments	4472	Samples the analogue signals from the sensors
Directional valve	REXROTH	4WMMR10C3X	Bypasses the flow if the angle of actuator shaft goes beyond $\pm 20^\circ$
Full body harness	Jelco	740	Protect the subjects from falling
Laser range finder	Micro-epsilon 1302-100	1507307	Measures shank linear displacement
Laser range finder	Micro-epsilon 1302-200	1509074	Measures body linear displacement
Load cell	Omega	LC302-100	Measures vertical reaction forces
Proportional servo-valve	MOOG	D681-4718	Controls the hydraulic flow to the rotary actuators
Rotary actuator	Rotac	26R21VDEISFTFLGMTG	Applies mechanical perturbations
Torque transducer	Lebow	2110-5k	Measures ankle torque
Virtual Environment Motion Trackers	HTC inc.	1551984681	Tracks the head motion
Virtual Reality Headset	HTC inc.	1551984681	Provides visual perturbations