

Materials List for

An Experiment Using Functional Near-Infrared Spectroscopy and Robot-Assisted Multi-Joint Pointing Movements of the Lower Limb

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³Vivax Ltda ⁴Highland Instruments

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jove.com/video/66004

Materials

Name	Company	Catalog Number	Comments
32 inch Smart TV	Samsung	N/A	TV connected to robot via HDMI cable
8-detector silicon photodiode (SiPD) optodes for optical detection with dual tip	NIRx Medical Technologies (Glen Head, NY, USA)	https://nirx.net/nirsport	
8-source optodes bundle for optical illumination with dual tip	NIRx Medical Technologies (Glen Head, NY, USA)	https://nirx.net/nirsport	
Aurora acquisition software	NIRx Medical Technologies (Glen Head, NY, USA)	https://nirx.net/nirsport	
Laptop Precision XPS 13	Dell Technologies (Round Rock, TX, USA)		
nirsLAB fNIRS Analysis software	NIRx Medical Technologies (Glen Head, NY, USA)	https://nirx.net/nirsport	
NIRSports2 fNIRS acquisition system	NIRx Medical Technologies (Glen Head, NY, USA)	https://nirx.net/nirsport	It has two different continuous wave optics (760 and 850 nm), 8 dual-ended LED sources and 8 dual-ended active detectors.
R	R-project.org (open source software)	https://www.r-project.org/	
Standard cut cap, black color for up to 128 holders.	Easycap GmbH (Wörthsee, Germany)	https://www.easycap.de/	
Vivax Assistive Rehabilitation Machine (ARM)	Vivax Ltda (São Paulo, Brazil)	https://vivaxbr.com/home/	It is a portable robot designed to deliver lower limb rehabilitation. It has a 3D reachable workspace and is compact and light, weighing about 35 lb., which makes it easy to transport and to install.