

Materials List for:

Simultaneous Scalp Electroencephalography (EEG), Electromyography (EMG), and Whole-body Segmental Inertial Recording for Multi-modal Neural Decoding

Thomas C. Bulea^{1,2}, Atilla Kilicarslan², Recep Ozdemir^{2,3,4}, William H. Paloski^{3,4}, Jose L. Contreras-Vidal^{2,4,5}

¹Functional and Applied Biomechanics Group, National Institutes of Health

²Laboratory for Non-invasive Brain-Machine Interface Systems, Department of Electrical and Computer Engineering, University of Houston

³Department of Health and Human Performance, University of Houston

⁴Center for Neuromotor & Biomechanics Research, University of Houston

⁵Department of Biomedical Engineering, University of Houston

Correspondence to: Thomas C. Bulea at thomas.bulea@nih.gov

URL: <https://www.jove.com/video/50602>

DOI: [doi:10.3791/50602](https://doi.org/10.3791/50602)

Materials

Name	Company	Catalog Number	Comments
BrainAmp Amplifier	Brain Products, GmbH		Quantity: 2
actiCAP EEG cap with 64 electrodes	Brain Products, GmbH		Quantity: 1
Brainvision MOVE wireless EEG system	Brain Products, GmbH		Quantity: 1
DataLOG MWX8 EMG data collection unit	Biometrics, Ltd.		Quantity: 1
SX230 EMG electrodes	Biometrics, Ltd.		Quantity: 8
R506 EMG ground electrode	Biometrics, Ltd.		Quantity: 1
Opal movement monitor (MARG sensor)	APDM, Inc.		Quantity: 11
Opal docking station for wireless data streaming	APDM, Inc.		Quantity: 2
Opal wireless access point	APDM, Inc.		Quantity: 2
Infrared Light Barrier Kit MK120	Velleman, Inc.		Quantity: 5
Wixel Programmable USB Wireless Module	Pololu, Inc.		Quantity: 6

Table 1. Equipment