

Materials List for:

Combined Invasive Subcortical and Non-invasive Surface Neurophysiological Recordings for the Assessment of Cognitive and Emotional Functions in Humans

Carlos Trenado¹, Saskia Elben², David Petri², Jan Hirschmann², Stefan J. Groiss^{1,2}, Jan Vesper³, Alfons Schnitzler^{1,2}, Lars Wojtecki^{1,2}

¹Institute of Clinical Neuroscience and Medical Psychology, Medical Faculty, Heinrich-Heine-University

²Department of Neurology, Center for Movement Disorders and Neuromodulation, University Clinic Düsseldorf

³Department of Neurosurgery, Functional Neurosurgery and Stereotaxy, Center for Movement Disorders and Neuromodulation, University Clinic Düsseldorf

Correspondence to: Lars Wojtecki at lars.wojtecki@med.uni-duesseldorf.de

URL: <https://www.jove.com/video/53466>

DOI: [doi:10.3791/53466](https://doi.org/10.3791/53466)

Materials

Name	Company	Catalog Number	Comments
BrainAmp Amplifier	Brain Products GmbH, Gilching Germany		Quantity: 2
BrainVision Recorder Software	Brain Products GmbH, Gilching Germany		1 License
BrainVision Analyzer Software	Brain Products GmbH, Gilching Germany		1 License
Fiber Optic cables and USB connectors	Brain Products GmbH, Gilching Germany		These come with the above listed equipment
Electrode Input box (64 channels)	Brain Products GmbH, Gilching Germany		Quantity: 1
EEG gel	Natus Inc		Quantity: 1
Isopropyl alcohol	Schülke & Mayr GmbH, Germany		Quantity: 1
Skin preparation gel	Weaver and Co, USA		Quantity: 1
MATLAB	Math-Works, Natick, Massachusetts, USA		1 License
FieldTrip toolbox	http://www.fieldtriptoolbox.org/		Open Source
Macroelectrodes (model 3387 quadripolar DBS lead)	Medtronic Inc., Minneapolis, MN, USA		Quantity: 2
Sterile percutaneous extension wires (model 3550-05)	Medtronic Inc., Minneapolis, MN, USA		Quantity: 2
Twist lock cable (model 3550-03)	Medtronic Inc., Minneapolis, MN, USA		Quantity: 2
custom made connectors to DIN 428092 touch proof connectors			Quantity: 2
Vercise Lead kit DB -2201	Boston Scientific		Quantity: 2
Contact extension kit NM-3138	Boston Scientific		Quantity: 2
O.R. cabel & extension SC-4100 A	Boston Scientific		Quantity: 2
connector to touch proof	Twente Medical Systems International B.V.		Quantity: 2
CT scanner Modell PQ2000 (Postoperative CT scans)	Philips Healthcare GmbH Hamburg		Quantity: 1
Presentation Software (Flanker Task)	Neurobehavioral systems Inc.		1 License
MEG System	Elekta Neuromag Inc		Alternatively
High-density EEG sensor net (128 or 256 channels)	Electrical Geodesics Inc (EGI), USA		Alternatively