

Materials List for:

High-density Electroencephalographic Acquisition in a Rodent Model Using Low-cost and Open-source Resources

Andrzej Z. Wasilczuk¹, Alexander Proekt¹, Max B. Kelz¹, Andrew R. McKinstry-Wu¹

¹Department of Anesthesiology and Critical Care, Perelman School of Medicine, University of Pennsylvania

Correspondence to: Max B. Kelz at Max.Kelz@uphs.upenn.edu

URL: <https://www.jove.com/video/54908>

DOI: [doi:10.3791/54908](https://doi.org/10.3791/54908)

Materials

Name	Company	Catalog Number	Comments
32 Channel RHD2132 amplifier headstage	Intan Technologies	C3314	
Aquisition Board	Open Ephys	v2.2	
100 Position Receptable Connector	Digi-Key	ED85100-ND	Headpiece
Acetone (1 L)	Sigma Aldrich	179973-1L	
Razor Blade (100 pack)	McMaster Carr	3962A4	
Wire-Cutting Pliers	MSC Industrial	321786	
2-Part Epoxy	McMaster Carr	7605A18	
PFA Coated Silver Wire (25 ft)	A-M Systems	787000	EMG Wire
CircuitWriter Pen	MCM Electronics	200-175	Silver Applicator for Electrode Tips
36 Position Dual Row Male Nano-Miniature Connector	Omnetics Connector Corporation	A79028-001	Headpiece to Amplifier Adapter
Conn Strip Header 2 x 50	Digi-Key	ED83100-ND	Headpiece to Amplifier Adapter
Clidox Base and Acitvator	Pharmaca	95120F & 96120F	Sterilant
Isoflurane	Priamal Enterprises Ltd	66794-019-10	
Oxygen	Airgas	OX USP300	
Closed Loop Temperature Controller	CWE Inc.	08-130000	
Curved Scissors	FST	14085-09	
0.25% Bupivacaine Hydrochloride	Hospira	0409-1159-02	Local Anesthetic
Meloxicam 5mg/ml	Henry Schein	6451602845	Pain/Inflammation Relief
0.9% Sodium Chloride	Hospira	0409-4888-20	Fluids
Cefazolin	Hospira	0409-0806-01	Antibacterial
No.11 Disposable Scalpel (20 pk)	Feather	2975#11	
Micro Serrefines	FST	18052-3	
Cotton Swabs (1,000 pk)	MSC Industrial	8749574	
0.5 mm Micro Drill Bit	FST	19007-05	
Stereotaxic Drill	Kopf	Model 1471	
Curved Forceps	Roboz	RS-5136	
Methyl Methacrylate	A-M Systems	525000	Cement for headpiece
Methyl Methacrylate Crosslinking Compound	A-M Systems	526000	
Curved Hemostats	FST	13003-10	Aide in Adapter Connection
RHD2000 standard SPI interface cable (3ft)	Intan Technologies	C3203	

Cantilever Arm	Instech	MCLA	
Micro Spatula (12 pk)	Fischer Scientific	S50822	
Digital Soldering Station	MCM Electronics	21-10115	
Rosin Core Solder 60/40 Tin/Lead	MCM Electronics	21-1045	
Color Craze Nail Polish with Hardeners (Nitrocellulose based)	L.A. Colors	CNP508	
Small Animal Stereotaxic Instrument with Digital Display Console	Kopf	Model 940	