

Materials List for:

Design and Assembly of an Ultra-light Motorized Microdrive for Chronic Neural Recordings in Small Animals

Timothy M. Otchy^{1,2}, Bence P. Ölveczky^{1,3}

¹Center for Brain Science, Harvard University

²Program in Neuroscience, Harvard University

³Department of Organismic and Evolutionary Biology, Harvard University

Correspondence to: Timothy M. Otchy at totchy@fas.harvard.edu

URL: <https://www.jove.com/video/4314>

DOI: [doi:10.3791/4314](https://doi.org/10.3791/4314)

Materials

Name	Company	Catalog Number	Comments
Chassis	Custom		Cut from PEI
Electrode Shuttle	Custom		Cut from PEI
Shuttle Tubes	Custom		Cut from Stainless Steel
Connector	Omnetics	A7886-001	Mates to A7877-001
Motor w/ Gearhead	Faulhaber	0206-A-001-B-021-47:1	
Wire Guide	Small Parts, Inc.	SWPT-0113-12	
Electrode Guide	Small Parts, Inc.	SWPT-0045-12	
10MΩ Pt-Ir electrodes	Microprobes, Inc	PI2PT310.0H3	
Platinum Wire	A-M Systems	772000	For electrode wires
Silver Wire	A-M Systems	786000	For ground wire
Tungsten Wire	A-M Systems	797000	For electrode pins
Transparency	3M	AF4300	
Torr Seal	Varian Inc., Agilent	9530001	
Kwik-Cast	World Precision Instruments, Inc.	KWIK-CAST	
Cyanoacrylate	Krazy Glue	KG517	
Fast-Set Epoxy	Hardman	04001	
Light Mineral Oil	Sigma-Aldrich	M5310	
Chlorine bleach			
Diagonal cutters			
Scalpel blade			
Forceps			
Drive jig	Custom		Epoxy the mating connector to a syringe or stick
Small Vice			