

Materials List for:

Construction of an Improved Multi-Tetrode Hyperdrive for Large-Scale Neural Recording in Behaving Rats

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URL: <https://www.jove.com/video/57388>

DOI: [doi:10.3791/57388](https://doi.org/10.3791/57388)

Materials

Name	Company	Catalog Number	Comments
Welding rod	Blue Demon	ER308L-035-01T	Stainless steel, 0.035" in diameter
Screw	McMaster	91771A060	Stainless steel, flat head, 0-80 thread, 5/8" in length
Screw	McMaster	91772A051	Stainless steel, pan head, 0-80 thread, 5/32" in length
Screw	McMaster	92196A056	Stainless steel, socket head, 0-80 thread, 5/16" in length
Screw	McMaster	92196A055	Stainless steel, socket head, 0-80 thread, 1/4" in length
Screw	McMaster	95868A131	Nylon, socket head, 2-56 thread, 3/16" in length, black
Screw nut	McMaster	90730A001	Stainless steel, narrow hex, 0-80 thread
Shoulder screw	McMaster	90298A213	Stainless steel, 8-32 thread, 3/16" in diameter, 1/4" in length
Cup screw	McMaster	92313A105	Stainless steel, 4-40 thread, 3/16" in length
Thumb screw	McMaster	94323A592	Nylon, 8-32 thread, 3/8" in length, black
Magnet	Apex	M3X1MMDI	Neodymium, 3 mm X 1 mm disc
Metal tubing	Small Parts	B00137QHNS	Stainless steel, 23 gauge, 0.0253" OD, 0.013" ID, 0.006" wall
Metal tubing	New England Small Tube	Custom-made	Stainless steel, 30 gauge, 0.012/0.0125" OD, 0.007/0.008" ID, full hard
Heat-shrink tubing	McMaster	7856K72	0.09" ID before shrinking, blue
Silicone tubing	A-M Systems	807300	0.040" ID, 0.085" OD
Polyimide tubing	A-M Systems	823400	0.0045" ID, 0.0005" wall
Ground wire	A-M Systems	791500	0.005" bare, 0.008" coated, half hard
Tetrode wire	California Fine Wire	Custom-made	0.0007" in diameter, platinum-iridium (90%-10%), HML and VG coating
EIB	Neuralynx		EIB-72-QC-Large
Gold pins	Neuralynx		large EIB pins
Tap	Balax	01302-000	M1.2 thread size
Tap	McMaster	2522A811	0-80 thread size, bottoming
Tap	McMaster	2522A771	0-80 thread size, plug
Tap	McMaster	26955A94	3/8"-24 thread size, bottoming

Tap	McMaster	2522A713	2-56 thread size
Tap	McMaster	2522A715	4-40 thread size
Tap	McMaster	2522A718	8-32 thread size
Die	McMaster	2576A457	3/8"-24 thread size, 1" OD
Drill bit	McMaster	30585A82	Wire gauge 65, 0.035" in diameter
Drill bit	McMaster	30585A83	Wire gauge 66, 0.033" in diameter
Drill bit	McMaster	30585A87	Wire gauge 70, 0.028" in diameter
Drill bit	McMaster	30585A88	Wire gauge 71, 0.026" in diameter
Drill bit	McMaster	30585A91	Wire gauge 73, 0.024" in diameter
Drill bit	McMaster	8870A23	3/16" in diameter
Dremel disc	Wagner	31M	Diamond coated, 22 mm in diameter, 0.17 mm in thickness
Steel wire	Precision Brand	21212	0.012" in diameter, full hard
Steel wire	Precision Brand	21007	0.007" in diameter, full hard
Steel wire	A-M Systems	792700	0.003" in diameter, half hard
Super glue	Loctite	LT-40640	# 406
Super glue	Loctite	LT-41550	# 415
Dental acrylic powder	Teets	223-3773	Coral
Dental acrylic liquid	Teets	223-4003	