

Table 1. Paired-recording parameters. The distance \pm error designates the distance between the micropipette tip and the closest electrode on the extracellular probe. The P2P amplitude is the maximum peak-to-peak amplitude of the JTAs across all extracellular channels for each paired recording. AP from bregma indicates the anterior-posterior distance relative to bregma for each pair. The depth is the distance from the brain surface to the cell recorded. This value is calculated by $Z_{\text{juxta}} - Z_{\text{juxta insertion}}$. The ADC channel column specifies which ADC channel was used to record juxtacellular activity and the ADC gain represents the amplification factor. Both are important parameters to load the juxtacellular recording. The Juxta threshold column indicates the threshold used for spike detection and the Juxta spikes indicates the corresponding number of detected spikes in the recording. The (x,y,z) Extra and (x,y,z) Juxta are the coordinates from the 'origin' point in the extracellular polytrode (which is depicted in the read me file) and from the tip of the pipette position, respectively. The (x,y,z) Insertion Extra and (x,y,z) Insertion Juxta are the positions of both probes when they touched the brain throughout insertion. These values are relative to the 'zeroing' point that is usually centered at the craniotomy and 1 to 4 mm above the tissue. (n.a. not available)

Pair-recorded	Distance (μm)	Error (μm)	P2P amplitude (μV)	AP from bregma (μm)	Depth (μm)	ADC channel	ADC gain	Juxta threshold (mV)	Juxta spikes	(x,y,z) Extra (μm)	(x,y,z) Juxta (μm)	(x,y,z) insertion Extra (μm)	(x,y,z) insertion Juxta (μm)
2014_11_25_Pair3.0	55.0	30	420.9	-3215.0	1337.5	0	100	0.8	348	-184.7, -200.9, -3312.0	-112.3, -200.9, -3310.6	-1109.8, -200.9, -2262.9	589.0, -200.9, -1973.1
2014_11_25_Pair1.1	106.4	30	23.9	-3215.0	1268.0	0	100	1.0	2230	-184.7, -200.9, -3312.0	-105.4, -200.9, -3241.1	-1109.8, -200.9, -2262.9	589.0, -200.9, -1973.1
2014_11_25_Pair1.0	107.1	30	27.4	-3215.0	1268.0	0	100	0.8	2270	-167.1, -213.4, -3332.0	-105.4, -200.9, -3241.1	-1109.8, -200.9, -2262.9	589.0, -200.9, -1973.1
2014_11_25_Pair2.0	154.4	30	21.3	-3215.0	1246.0	0	100	0.8	513	-184.7, -200.9, -3312.0	-61.4, -200.9, -3219.0	-1109.8, -200.9, -2262.9	589.0, -200.9, -1973.1
2014_03_26_Pair2.1	63.4	40	91.1	-3561.0	1815.3	1	1000	1.0	16	50.1, -467.9, -4021.0	90.4, -468.9, -3968.0	-959.0, -467.9, -2621.0	547.0, -468.9, -2153.0
2014_03_26_Pair2.0	90.5	40	62.8	-3561.0	1815.3	1	1000	1.0	150	0.01, -467.9, -3965.0	90.4, -468.9, -3968.0	-959.0, -467.9, -2621.0	547.0, -468.9, -2153.0
2014_10_17_Pair1.1	68.9	30	38.2	-3121.0	1256.0	0	100	1.0	322	40.8, 0.0, -2359.2	98.1, 0.0, -2321.0	-861.0, 0.0, -1348.0	902.9, 0.0, -1065.0
2014_10_17_Pair1.0	68.3	30	36.3	-3121.0	1256.0	0	100	1.0	442	0.04, 0.0, -2313.7	98.1, 0.0, -2321.0	-861.0, 0.0, -1348.0	902.9, 0.0, -1065.0
2014_03_20_Pair3.0	72.7	40	30.4	-2800.0	1562.8	1	1000	1.5	1311	47.6, 0.0, -3438.6	63.4, 0.0, -3347.8	-906.0, 0.0, -2365.0	1152.0, 0.0, -1785.0
2014_03_20_Pair2.0	99.0	40	17.8	-2800.0	1543.6	1	1000	0.5	4480	47.6, 0.0, -3438.6	81.4, 0.0, -3328.6	-906.0, 0.0, -2365.0	1152.0, 0.0, -1785.0
2014_11_13_Pair1.0	93.8	30	22.7	-3404.0	1271.7	0	100	0.5	650	-52.6, 96.6, -2806.6	41.0, 97.1, -2771.7	-865.0, 94.2, -1897.0	962.3, 55.3, -1500.0
2014_10_17_Pair2.0	115.8	30	15.0	-3121.0	1213.2	0	100	1.0	771	48.1, 0.0, -2367.4	123.3, 0.0, -2278.2	-861.0, 0.0, -1348.0	902.9, 0.0, -1065.0
2014_03_20_Pair1.0	198.0	40	4.2	-2800.0	1468.2	1	1000	2.0	2555	0.1, 0.0, -3379.7	153.6, 0.0, -3253.2	-906.0, 0.0, -2365.0	1152.0, 0.0, -1785.0
2014_11_13_Pair3.0	193.0	30	6.6	-3404.0	1180.3	0	100	1	2004	-52.6, 96.6, -2806.6	93.2, 97.1, -2680.3	-865.0, 110.5, -1897.0	962.3, 113.1, -1500.0
2014_02_19_Pair1.0	164.5	40	2.3	-3051.0	~1000	1	1000	0.5	4379	-113.3, 0.0, -1225.4	-22.7, 0.0, -1079.8	-901.0, 0.0, -266.0	n.a.
2014_02_14_Pair1.0	394.7	40	6.5	-3000.0	1600.0	1	1000	0.3	1208	-359.1, -140.2, -1333.6	15.5, -90.2, -981.8	-1224.7, -140.2, -366.7	658.2, -90.2, -159.7
2013_12_20_Pair1.0	446.0	40	2.8	-3066.0	~1600	4	1000	0.5	3396	267.0, -307.0, -1247.0	0.0, -307.0, -1604.0	n.a.	n.a.
2014_10_10_Pair1.0	470.9	30	4.4	-3206.5	822.1	0	100	0.5	1607	-255.6, 89.5, -2238.9	232.5, 89.5, -2525.9	-1296.0, 89.5, -1074.0	1050.0, 89.5, -760.0
2015_09_09_Pair7.1	120.9	40	21.1	2469.0	1047.8	0	100	1.0	634	408.7, 0.0, -5282.4	196.5, 0.0, -4865.0	-681.9, 0.0, -4063.0	775.1, 0.0, -3817.2
2015_09_09_Pair7.0	136.2	40	20.7	2469.0	1032.8	0	100	1.0	1082	408.7, 0.0, -5282.4	204.0, 0.0, -4850.0	-681.9, 0.0, -4063.0	775.1, 0.0, -3817.2
2015_09_09_Pair6.0	176.0	40	23.5	2469.0	995.8	0	100	1.0	489	408.7, 0.0, -5282.4	225.0, 0.0, -4813.0	-681.9, 0.0, -4063.0	775.1, 0.0, -3817.2
2015_09_09_Pair4.0	166.0	40	18.1	2469.0	1211.5	0	100	1.0	1899	408.7, 0.0, -5282.4	266.1, 0.0, -4875.1	-681.9, 0.0, -4063.0	934.0, 0.0, -3663.6
2015_09_04_Pair5.0	96.1	40	30.8	-2951.0	1185.5	0	100	-1.0	185	494.5, 0.0, -4920.0	331.5, 0.0, -4594.8	-807.6, 0.0, -3459.2	984.0, 0.0, -3409.3
2015_09_04_Pair6.0	88.7	40	7.0	-2951.0	1059.6	0	100	0.3	636	494.5, 0.0, -4920.0	161.4, 47.2, -4415.2	-807.6, 0.0, -3459.2	746.6, 47.2, -3355.6
2015_09_04_Pair6.1	88.7	40	5.0	-2951.0	1059.6	0	100	1.0	1172	494.5, 0.0, -4920.0	161.4, 47.2, -4415.2	-807.6, 0.0, -3459.2	746.6, 47.2, -3355.6
2015_09_03_Pair6.0	153.3	40	24.1	-2456.0	1063.2	0	100	1.0	3329	487.2, 0.0, -5333.3	179.0, 0.0, -4833.2	-612.5, 0.0, -4103.0	808.0, 0.0, -3790.0
2015_09_03_Pair6.1	82.4	40	19.7	-2456.0	1043.2	0	100	2.0	2876	487.2, 0.0, -5333.3	166.0, 0.0, -4853.2	-612.5, 0.0, -4103.0	808.0, 0.0, -3790.0
2015_09_03_Pair9.0	11.5	40	416.3	-2456.0	1152.8	0	100	-0.2	5007	487.2, 0.0, -5333.3	266.2, 20.0, -5075.2	-612.5, 0.0, -4103.0	991.5, 20.0, -3922.4
2015_08_28_Pair2.0	116.9	40	9.7	-2443.0	1125.2	0	100	1.0	472	299.1, -119.4, -4588.2	362.9, -94.6, -4485.6	-725.0, -119.4, -3503.1	910.0, -94.6, -3463.0
2015_08_28_Pair2.1	116.9	40	10.6	-2443.0	1125.2	0	100	1.0	1053	299.1, -119.4, -4588.2	362.9, -94.6, -4485.6	-725.0, -119.4, -3503.1	910.0, -94.6, -3463.0
2015_08_28_Pair2.2	104.0	40	11.7	-2443.0	1034.0	0	100	1.0	639	299.1, -119.4, -4588.2	356.2, -94.6, -4497.0	-725.0, -119.4, -3503.1	910.0, -94.6, -3463.0
2015_08_28_Pair9.0	127.7	40	8.2	-2443.0	917.0	0	100	1.0	3181	299.1, -119.4, -4588.2	347.4, -119.4, -4451.7	-725.0, -119.4, -3503.1	820.8, -119.4, -3534.7
2015_08_21_Pair3.1	132.9	40	19.4	-2984.0	1286.0	0	100	0.4	4466	493.0, 33.3, -4722.0	437.0, 33.4, -4462.0	-706.0, 33.3, -3381.4	1160.6, 33.4, -3176.0
2015_08_21_Pair3.0	132.8	40	19.4	-2984.0	1286.0	0	100	0.4	8117	469.0, 33.3, -4695.6	437.0, 33.4, -4462.0	-706.0, 33.3, -3381.4	1160.6, 33.4, -3176.0