Resource Summary Report

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MAP Software

RRID:SCR_003170
Type: Tool

Proper Citation

MAP Software (RRID:SCR_003170)

Resource Information

URL: http://www.plexon.com/products/map-software

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Description: A suite of client / server programs that control spike sorting in the Multichannel Acquisition Processor (MAP) Data Acquisition System (MAP System) and provides real-time data visualization and analysis. Plexon's original program supporting multichannel data acquisition is a suite of programs referred to as the Real-Time Acquisition System Programs for Unit Timing in Neuroscience software (RASPUTIN). This combination of software and hardware enables users to view waveforms, acquire action potential waveforms around a voltage-threshold crossing, sort them in real time according to their shape, record continuous analog signals, such as field potentials, eye position, blood pressure, as well as capture external digital-event data, such as individual TTL lines or multi-bit strobed word data. RASPUTIN utilizes a client/server architecture on a Microsoft Windows operating system. The server program runs the MAP box and distributes the data among a set of cooperating client programs. The program can record analog signals and spike and digital-event data in a single data file, and supports 16, 32, 48, 64, 96 and 128 channel configurations. RASPUTIN's operation is based on two primary programs: Sort Client and MAP Server. The Sort Client is the primary control program for the MAP System hardware and may be used to adjust the MAP operating parameters (e.g., amplification, filtering) and to set the specific sorting parameters for each channel. MAP Server is the low-level interface for configuring the MAP, which transfers commands such as gain and filter changes or parameter settings from the various clients to the MAP box. MAP Server also accumulates data coming from the MAP box in a circular buffer memory. The client programs connect to MAP Server to gain access to that data. MAP Server also mediates communication between the clients, keeping them informed of commands sent to the MAP from other clients. RASPUTIN is not sold separately, but rather arrives pre-loaded on the MAP Control Computer with the purchase of any MAP System. As the MAP System has been replaced by the advanced OmniPlex D Neural Data Acquisition System, Plexon is no longer developing the RASPUTIN software

program.

Abbreviations: MAP Software

Synonyms: Multichannel Acquisition Processor Software, RASPUTIN, Real-Time Acquisition System Programs for Unit Timing in Neuroscience, Real-Time Acquisition System Programs for Unit Timing in Neuroscience software

Resource Type: commercial organization, software application, software resource, data processing software

Keywords: electrophysiology, analysis, sort client, map server, spike sorting, windows

Funding:

Availability: Commercial license, Only comes loaded on hardware

Resource Name: MAP Software

Resource ID: SCR_003170

Alternate IDs: SciRes_000185

Record Creation Time: 20220129T080217+0000

Record Last Update: 20250412T054807+0000

Ratings and Alerts

No rating or validation information has been found for MAP Software.

No alerts have been found for MAP Software.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 17 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Stoll FM, et al. (2024) Preferences reveal dissociable encoding across prefrontal-limbic circuits. Neuron, 112(13), 2241.

Aggarwal A, et al. (2024) Neural assemblies coordinated by cortical waves are associated

with waking and hallucinatory brain states. Cell reports, 43(4), 114017.

Stoll FM, et al. (2024) Decision-making shapes dynamic inter-areal communication within macaque ventral frontal cortex. Current biology : CB, 34(19), 4526.

De A, et al. (2022) Coding of chromatic spatial contrast by macaque V1 neurons. eLife, 11.

De A, et al. (2020) Fast and reversible neural inactivation in macaque cortex by optogenetic stimulation of GABAergic neurons. eLife, 9.

Peres R, et al. (2019) Neuronal response properties across cytochrome oxidase stripes in primate V2. The Journal of comparative neurology, 527(3), 651.

Kim T, et al. (2019) Neural Coding for Shape and Texture in Macaque Area V4. The Journal of neuroscience : the official journal of the Society for Neuroscience, 39(24), 4760.

Neely RM, et al. (2018) Volitional Modulation of Primary Visual Cortex Activity Requires the Basal Ganglia. Neuron, 97(6), 1356.

Girasole AE, et al. (2018) A Subpopulation of Striatal Neurons Mediates Levodopa-Induced Dyskinesia. Neuron, 97(4), 787.

Mazurek KA, et al. (2018) Mirror Neuron Populations Represent Sequences of Behavioral Epochs During Both Execution and Observation. The Journal of neuroscience : the official journal of the Society for Neuroscience, 38(18), 4441.

Ryan MB, et al. (2018) Aberrant Striatal Activity in Parkinsonism and Levodopa-Induced Dyskinesia. Cell reports, 23(12), 3438.

Rouse AG, et al. (2018) Condition-Dependent Neural Dimensions Progressively Shift during Reach to Grasp. Cell reports, 25(11), 3158.

Mazurek KA, et al. (2017) Injecting Instructions into Premotor Cortex. Neuron, 96(6), 1282.

Samuelsen CL, et al. (2017) Processing of Intraoral Olfactory and Gustatory Signals in the Gustatory Cortex of Awake Rats. The Journal of neuroscience : the official journal of the Society for Neuroscience, 37(2), 244.

El-Shamayleh Y, et al. (2017) Selective Optogenetic Control of Purkinje Cells in Monkey Cerebellum. Neuron, 95(1), 51.

Brincat SL, et al. (2016) Prefrontal Cortex Networks Shift from External to Internal Modes during Learning. The Journal of neuroscience : the official journal of the Society for Neuroscience, 36(37), 9739.

Velliste M, et al. (2014) Motor cortical correlates of arm resting in the context of a reaching task and implications for prosthetic control. The Journal of neuroscience : the official journal of the Society for Neuroscience, 34(17), 6011.