



DECEMBER 13, 2012

OMNIPLEX® SOFTWARE 1.7 RELEASED

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The newest release of the OmniPlex® software is now available at www.plexon.com. OmniPlex users will experience increased accuracy of timestamps, easier and more accurate spike sorting, an enhanced PCA feature space, automatic 2D polygon sorting features, and most importantly – exceptionally low latency for DigiAmp™ digitizing amplifier users.

OmniPlex System users will benefit from increased accuracy of timestamps through aligned spike extraction. As compared to standard thresholding in which a spike's timestamp is the time at which it crossed the threshold, aligned extraction assigns the timestamp as the time of the positive or negative spike peak. More practically, PCA clusters will be more compact and better separated, making spike sorting easier and more accurate.

Building on the aligned spike extraction algorithms, OmniPlex Software 1.7 enables a new enhanced PCA feature space. In many cases, enhanced PCA creates a projection which will give superior cluster separation and compactness when compared to standard PCA. The combination of aligned extraction and enhanced PCA will often give even better results, in terms of cluster quality, than either feature used alone.

OmniPlex's popular online spike sorting functionality has once again expanded! Automatic spike sorting can now be performed in 2D polygon sorting mode. After sorting of the spike snapshot is complete, an ellipse is fitted to each cluster that is found by the auto-sort. Similarly, crossing waveforms in the main spike display will now produce the corresponding 2D sorting ellipses as an alternative to manually drawing contours. As a bonus, manually-drawn contours can be automatically "cleaned up" and converted to ellipses.

Additional details and installation package are available at www.plexon.com. OmniPlex Software 1.7 is available at no charge for existing systems as part of Plexon's Lifetime Technical Support program.

UNDER 2MS LATENCY FOR OMNIPLEX WITH DIGIAMP

Possibly the most significant benefit of OmniPlex 1.7 is that when used with the DigiAmp digitizing amplifier, it yields an almost negligible system latency of less than 2 milliseconds! This figure is the actual end-to-end latency through the entire OmniPlex system from hardware input to hardware output, including an online user client program. The exceptionally low latency is achieved when either the DigiAmp (64 through 256 channels) or MiniDigi™ (16 through 64 channels) digitizing amplifiers are used.

HAPPY HOLIDAYS

The entire team at Plexon wishes you and your families around the world a happy and peaceful holiday season. We have exciting things planned for you in the new year.

HOLIDAY SCHEDULE

Plexon's world headquarters will be open through the holidays with the exception of Dec 24–25, 2012 and January 1, 2013 so our employees may celebrate the season with their families. However, the manufacturing department will be closed as of December 21, so please reach out with any needs as soon as you are able.

SAVE THE DATE

Plexon's Annual Neurophysiology Workshop will be held in Dallas, Texas on April 29 – May 3, 2013. More details to come . . .

A BIT OF TRIVIA

Do you know what the significance of the year 2013 is to Plexon? Send your guess to crystal@plexon.com, and stay tuned as we reveal the answer in January.

The first 25 correct answers will receive a Plexon coffee mug!!