

FOR IMMEDIATE RELEASE

Plexon Inc Launches Digital Headstages, Digital Headstage Processor (DHP) to Expand the OmniPlex® D Neural Data Acquisition System Options

DALLAS, TX -- (July 23, 2014) - Plexon Inc, the leader in advanced hardware and software solutions for neuroscience and behavioral research, announces the much anticipated launch of its new light-weight, multiplexing Digital Headstages and accompanying Digital Headstage Processor (DHP). These new components are designed for use with Plexon's flagship OmniPlex® D Neural Data Acquisition System's hardware and software. Combined they offer an especially full featured, efficient and economical solution for electrophysiology research laboratories – especially at higher channel counts.

The new Digital Headstages and DHP comprise a new subsystem for the OmniPlex D System, rather than representing a new recording platform. Plexon launched the first OmniPlex System in 2009 in which analog signals were captured and transmitted by an analog headstage, then amplified in what Plexon simply called an Amplifier. Then analog signals were sent to the OmniPlex chassis (the acquisition system core) where digitization of the signal took place. Three years later Plexon launched the OmniPlex D System in which the digitization of the signal takes place earlier in the process. The analog to digital conversion occurs in the DigiAmp™ (or MiniDigi™) Digitizing Amplifier rather than downstream in the chassis. Thus, what differentiates the two systems is the electronics to process the *input* signal in the core of the system – be it an analog or digital input. The original OmniPlex System chassis received analog signals, while the chassis in the OmniPlex D System receives digital signals.

Digital headstages with a DHP together are an alternative subsystem to the analog headstages with DigiAmp/MiniDigi subsystem in which either subsystem may be operated as part of an OmniPlex D System since both subsystems output a digital signal to the chassis. A few selected benefits of an OmniPlex D System with the new subsystem include:

- Effective 16-bit sampling at 40kHz that researchers have come to expect from Plexon,
- Phase corrected for simultaneous sampling to improve trolal recording and software referencing, unlike other digital headstage based systems,
- Electrical isolation,
- Decreased sensitivity to ambient noise,
- Up to 256 channels,
- 16 and 32 channel digital headstages weighing 1.0g or less, making them some of the lightest weight digital headstages on the market,
- Smaller, lighter headstage cable wire bundles with fewer wires for less encumbered animals, and
- More economical pricing, especially at higher channel counts.

In conjunction with the official launch of the Plexon Digital Headstages and DHP subsystem, the newest OmniPlex software – version 1.12 – for use with all OmniPlex Family Systems has been released and is available online. The primary benefit of this new release is its compatibility with the new digital components. This latest download is available for Windows 7 and XP platforms, and can be found on the OmniPlex System webpage, and at www.plexon.com/software-downloads.

For more information regarding the new Digital Headstages, the DHP or if these components when used with the OmniPlex D System will enhance your research capabilities, contact info@plexon.com.

About Plexon Inc

Plexon is a pioneer and leading innovator of custom, high performance data acquisition, behavior and analysis solutions specifically designed for scientific research. We collaborate with and supply thousands of customers including the most prestigious neuroscience laboratories around the globe driving new frontiers in areas including basic science, brain-machine interfaces (BMI), neurodegenerative diseases, addictive behaviors and neuroprosthetics. Plexon offers integrated solutions for *in vivo* neurophysiology, optogenetics and behavioral research -- backed by its industry-leading commitment to quality and customer support. www.plexon.com.