



nanoZ

Impedance Measuring Device & Automated Electroplating

Efficient	Measure 64 channels in under 1 minute
Automated or manual	Electroplating modes to achieve target impedance
Large impedance (Z) range	1 k – 10 MΩ - use with all electrodes
Z accuracy and precision	1 kΩ display resolution 5 k – 5 MΩ ≤ 2% , 5 – 10 MΩ ≤ 5% error All channels are matched to within 1%
Electroplate mode	5V compliant allows for customization
Lesioning mode	+/-12 μA max
Site rejuvenation	Clean electrodes
Easy connection	USB connection that works with most PCs
User friendly	Updates via USB interface to minimize frustration
Develop nanoZ apps	Python and MATLAB libraries for versatility
Save files	Excel spreadsheet format for easy data storage
NeuroNexus compatible	Mate with A style probes and Adapt to D,OA,H,HC,PCM,OCM style probes
Compact size	Portable at 3.2 x 2.8 x 0.47 inches (81 x 70 x 12 mm)

Fueling Discovery

406.585.4542 sales@neuralynx.com neuralynx.com

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The nanoZ is a computer-based device for multichannel electrode impedance measurement, automated electroplating, site activation, site rejuvenation, as well as delivering electrical current for lesioning or tissue marking. The nanoZ uses very low test currents for in vitro or in vivo experiments, and can measure the impedance of a 64 channel electrode array in less than 1 minute. There are several fully automated modes, including: whole-electrode impedance testing and electroplating with precise control over current magnitude and time (e.g. for multichannel impedance matching). The nanoZ has an intuitive user interface making it surprisingly, user-friendly. The nanoZ is directly compatible with many NeuroNexus Technologies Silicon Electrodes for which it was designed and adapters to other styles of NeuroNexus probes are available for purchase. In addition, the nanoZ can be used with Neuralynx electrode interface boards (EIB's) with the addition of Neuralynx adapters.

The setup and operation of the nanoZ is described in the user manual, and includes information about the MATLAB Software Development Kit (SDK) for developing your own, customized nanoZ applications.

EEPROM: stores device-specific calibration values; firmware

PC Requirements: XP/XP64/Vista/Windows 7

Z test current: 1nA RMS (max), Bias Current 50pA (typical)

Each nanoZ comes supplied with:

nanoZ device * 1.8m USB cable * NZA-DIP16 adapter * NZ-CAL test adapter
3-pin to alligator clip cable * Installation CD

The nanoZ application has five separate modes of operation:

Manual control mode * Impedance test mode * DC electroplate mode
Impedance spectroscopy mode * Activation mode

2 year warranty



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