Voltammetric Amplifiers

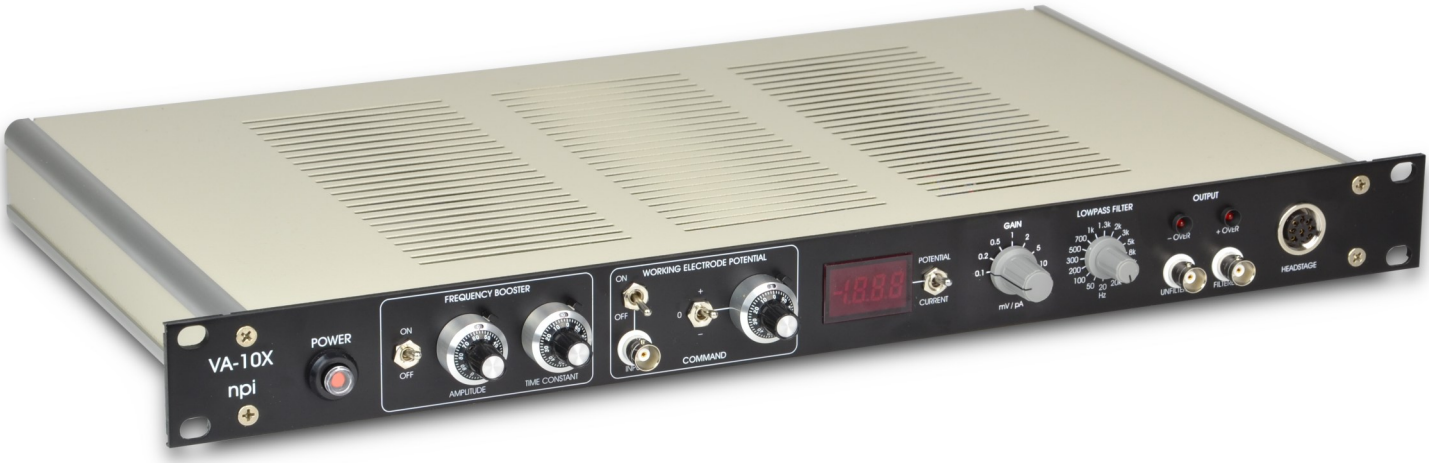
npi Electronic Instruments for the Life Sciences

made to measure

Amperometry & Cyclic Voltammetry

VA-10X

19“ amplifier with headstage



- Low-noise potentiostat, works in pA range
- Bandwidth >10 kHz with optional frequency booster

Applications

- Neurotransmitter detection (e.g. dopamine, glutamate)
- Scanning electrochemical microscopy (SECM)
- Scanning electrochemical cell microscopy (SECCM)
- Scanning Ion Conductance Microscopy (SICM)
- Fast-Scan Cyclic Voltammetry (FSCV) with up to 1000 V/s
- Lipid bilayer recordings
- Use with Biosensors, self-made electrodes, ALA's carbon fiber electrodes, etc.

VA-10M

Modular amplifier for EPMS-07 system

- Modular concept for highest flexibility, combine several modules to multi-channel system
- Special multi-channel headstages available

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Miniature headstages

For *in vivo* recordings

- Single-channel or multi-channel
- Individual command voltages
- Flexible cable for freely behaving animals

VA-10X

Standard Features

- Gain (mv/pA): 0.5, 1, 2.5, 5, 10, 25, 50
- Low-pass Filter (Hz): 20, 50, 100, 200, 300, 500, 700, 1k, 1.3k, 2k, 3k, 5k, 8k, 10k, 13k, 20k (8-pole Bessel filter)
- Feedback resistor: 500 MΩ (±20 nA)
- Command range: ±1 V
- Frequency booster: enhance recording bandwidth to several 10 kHz
- Telegraph Gain: +1 V … +7 V, (1 V/step)
- Telegraph Filter: – 8 V … +7 V, (1 V/step)

Options for Customization:

- Gain: e.g. 0.005 mV/nA … 5 mV/nA
- Filter frequency: single or multiple custom frequencies
- Command range: e.g. ±2 V, ±3 V
- Feedback resistor: e.g. 1 MΩ, 5 MΩ, 50 MΩ, 100 MΩ, 1 GΩ, 5 GΩ,
- Telegraph: e.g. 0.4 V/step
- Headstage: Classic 3-electrode or simple 2-electrode approach

Ask us about the custom design to replace the Dagan Chem Clamp amplifier!!!

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