

Amplifiers

For extracellular recording

EXT-02F

High-End dual channel desktop amplifier



- Record any extracellular signal (single units, EEG, ECG, etc.) using versatile filter settings
- Built-in audio monitor allows identification of cells
- Optional headstage with high-impedance input

EXT-02B

Basic dual channel desktop amplifier



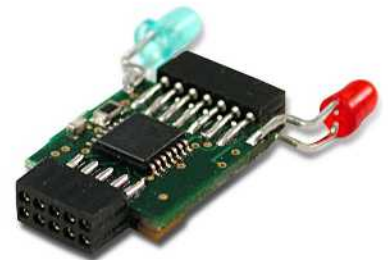
- Save money with this simpler version of the EXT-02F
- Headstages switchable from recording to stimulus
- Combine multiple EXT-02B up to 8 channels

Features:

- Stand-alone amplifiers with external power supply for low-noise recordings
- Two independent channels with high-/lowpass filters and gain up to 10,000

Options:

- Miniature headstages for recordings in freely moving animals
- Filter frequencies or gain settings can be customized to **Your** needs





EXT 10-2F

Single channel amplifier with versatile filters



- Directly filter your signal (high and low pass filter built-in)
- Comes with headstage with high-impedance input
- Easy compensation set of DC offsets
- This is a modular version of the EXT-02F

EXT-10C

Single channel amplifier with capacity compensation



- Record fast signals with capacitance compensation
- Comes with headstage with high-impedance input
- Easy compensation set of DC offsets
- Combine with DPA or other filters

EPMS-07

Customize **YOUR** recording setup

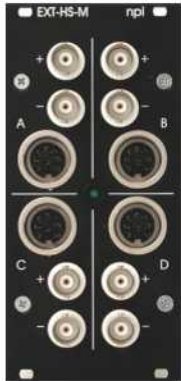


- Combine different amplifiers, filters, stimulators into one EPMS housing
- Multi-channel miniature headstages can be connected via breakout modules



EXT-HSM/EXT-MHS-M

Headstage connection modules



EXT-HSM

- Connect up to 4 differential headstages to your EPMS-07

EXT-MHS-M

- Connect a miniature headstage with up to 8 channels
- Up to 2 independent switchable stimulation lines

DPA-2FX/DPA-2FS

Differential amplifier and filter



- High- and lowpass filter with differential input
- Bessel filter with 16 corner frequencies
- 10 MΩ input for direct connection of low impedance electrodes
- Adds high flexibility to multi-channel extracellular headstages
- Combine with EXT-HS-M or EXT-MHS-M to form a multi-channel recording setup

DPA-2FL

Low-noise differential amplifier and filter



- Special low noise version of the DPA
- Bessel filter with 6 corner frequencies
- Best used with EPMS-E-07 (external power supply)



EXT-16DX

16 channel amplifier with synchronized filters



- Miniature headstages for in vivo recording
- Easy setting of amplification and filters
- Choose one channel as common reference

EXT-T2

Tetrode amplifier with 2 x 4 channels



- Easy to use amplifier for tetrode recordings
- No accidental change in filter or gain settings
- Save money by using home-made tetrodes
- Use with miniature headstages for freely moving animals

EXT-T1M

Tetrode amplifier with 1 x 4 channels



- Modular version of the EXT-T2
- Internal filters are pre-set by dip-switches

Current injection and resistance measurement

- Optional add-on modules available:
 - For impedance measurement
 - For DC current injection (stimulate, make lesions, clean electrode tips)

Contact:

General:

npi electronic GmbH

Phone: +49-7141-9730230

Fax: +49-7141-9730240

sales@npielectronic.com

www.npielectronic.com

North America:

ALA Scientific Instruments

Phone: +1-631-393-6401

Fax: +1-631-393-6407

sales@alascience.com

www.alascience.com

High quality npi products - made in Germany

Universal Amplifiers

patch clamp, single cell electroporation, transfection, intra- and extracellular, voltammetry

Bridge Amplifiers

most accurate current clamp amplifiers, extracellular

Extracellular Amplifiers

LFP, EEG, EMG, single units single- or multi-channel

Voltammetric Amplifiers

voltametry, amperometry, FCV

Temperature Controllers

analog control for low-noise operation

Iontophoretic Substance Application:

fast and precise application of charged substances

Customized Devices and Prototypes

easy customization due to in-house production

Miniature Headstages

record in freely moving animals, intra- and extracellular, voltammetry

Amplifiers for Oocytes

fast and accurate clamp with large currents

Single Electrode Amplifiers

fastest discontinuous current and voltage clamp

Isolated Stimulators

current and/or voltage, battery or power supply

Filters and Signal Conditioners

high- and lowpass Bessel filters

Pressurized Substance Application

precise application of all liquids

Fiber Photometry Systems

plug-and-play addition to any e-phys rig

For more information contact:

General:

npi electronic GmbH

Phone: +49-7141-9730230

Fax: +49-7141-9730240

sales@npielectronic.com

www.npielectronic.com

North America:

ALA Scientific Instruments

Phone: +1-631-393-6401

Fax: +1-631-393-6407

sales@alascience.com

www.alascience.com