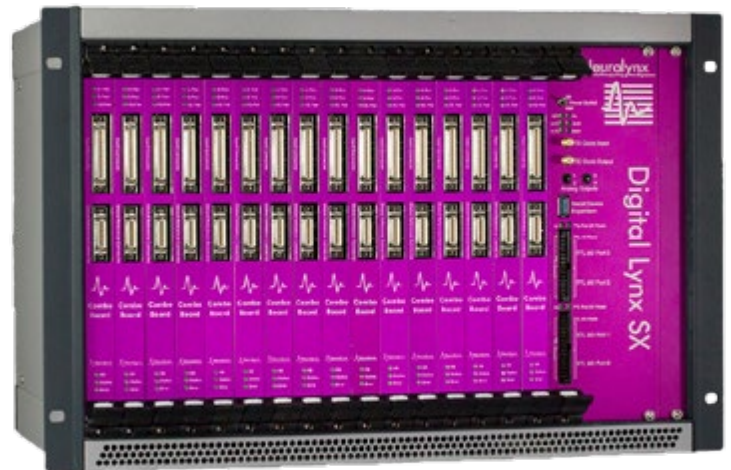


## Data Acquisition: Digital Lynx SX

high-density electrophysiology system designed for “no compromise” signal quality

- Highest channel count: 512
- Lowest noise: 1.3  $\mu$ V or less
- Highest resolution: 24 bit A/D converters
- Widest dynamic input range:  $\pm$  132 mV
- Full bandwidth: DC to 8 kHz
- Most flexible referencing options:
  - 8 references per 32 channel bank
  - 8 global references



**Digital Lynx 16SX / 512 Channels**

The Digital Lynx SX is our highest performance acquisition and experiment control system, providing the lowest noise, DC coupled, wide-band recording solution with the largest signal input range. The foundation of the Digital Lynx SX system is the **new Combo Board**, performing both analog-to-digital signal conversion and digitally controlled reference selection.

### Add more power and flexibility to data acquisition and experiment possibilities with:

#### HPP - Hardware Processing Platform

user programmable, low latency signal processing board for spike and LFP processing for signals from all acquisition interfaces

#### FreeLynx - wireless acquisition up to 10 meters

multiple configurable digital telemetry modules support an entire new class of social interaction, large and 3D maze experiments

#### Stim Headstages - 18 & 36 channels

traditional unity gain headstage with micro-controller stimulus switching

#### Digital Multiplexing (MUX) Headstages

lower cost solution for 16 to 128 channel configurations

### Digital Lynx Combo Board

**32 channels per Combo Board: up to 512 recording channels in single 16SX chassis**

- One board with dual functionality:
  - digital reference selection
  - analog-to-digital conversion
- 24 bit A/D converters
- Common Mode Rejection ratio exceeds 105 dB at 60 Hz
- 8 analog references per board
- 40 kHz sample rate
- Lower cost per channel