

EIB-36N: 36 Channel Electrode Interface



The Electrode Interface Board (EIB-36N) is mounted to microdrive hardware and provides the electronic signal connection between electrode wires and a 36 channel Neuralynx Headstage Pre-amplifier (HS-36). The EIB-36N also provides mechanical connection between microdrive hardware and the HS-36. The EIB-36N is a smaller version of the EIB-36.

The EIB-36N does not contain any active electronics, and can pass signals in either direction. The HS-36 will define the signal direction via its buffer amplifiers.

HS-36 Connection

The HS-36 will only mount to the EIB-36N in one direction. Make sure the mounting posts connect to the blacked out pins on the Pin Layout diagram (bottom left and right pins).

EIB-36N Mounting

The EIB-36N is designed for mounting on a microdrive. Use the screw holes (left and right) to mount the EIB-36N securely to a microdrive.

Electrode Connection

Electrode wires will be inserted from the bottom of the board. Insulation does not need to be removed from the wire if using Neuralynx EIB Pins. See the *Electrode Attachment Guide* for more information on using EIB Pins. The EIB-36N uses the Small EIB Pins (0.03cm/0.012").

WARNING: If stimulus lines are connected to electrodes, ensure they are not shorted to +5V before turning on headstage power. Failure to check this may result in paralysis or death of the test subject.

EIB Reuse

Reuse of the EIB-36N is not recommended, but is possible. If reuse of the EIB-36N is required, please contact Neuralynx for assistance.



EIB-36N: Pin Layout (Top View)

S1_Src Grid Grid Ina15 Ina15 Ina16 Ina10 Ina21 Ina21 Ina21 Ina21 Ina22 Ina16 I

EIB-36N: Omnetics 44pin (Close Up)

Pin Mapping

The EIB-36N is designed to work with the Digital Lynx system, which supports 32 recording channels. See the HS-36 manual if using an analog recording system (Cheetah 160 or Cheetah32).

Technical Specifications:

Size (LxWxH)	2.4cm x 0.7cm x 0.6cm
Weight	518mg
Signals	 32 electrodes (A1→A16, B1→B16) 2 Ground (G) 1 Reference (R1) 2 Differential Stimulus
	channels (51-, 51+, 52-, 52+)
Connections	 39 0.03cm Vias
	Omnetics 44 pin
Mounting Screw Diameter	0.13cm