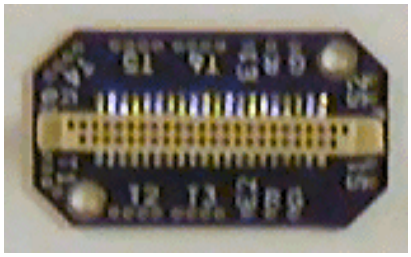
EIB-27 Micro: 27 Channel Electrode Interface



The Electrode Interface Board (EIB-27 micro) is mounted to microdrive hardware and provides the electronic signal connection between electrode wires an 8 channel Neuralynx Headstage Pre-amplifiers (HS-27 micro). The EIB-27 micro also provides mechanical connection between microdrive hardware and the HS-27 micro.

The EIB-27 micro does not contain any active electronics, and can pass signals in either direction. The HS-27 micro will define the signal direction via its buffer amplifiers.

HS-27 micro Connection

The HS-27 micro will only mount to the EIB-27 micro in one direction. Make sure the mounting post connects to the blacked out pins on the Pin Layout diagram (top right pin).

EIB-27 micro Mounting

The EIB-27 micro is designed for mounting on a microdrive. Use the screw holes (left of board) to mount the EIB-27 micro securely to a microdrive.

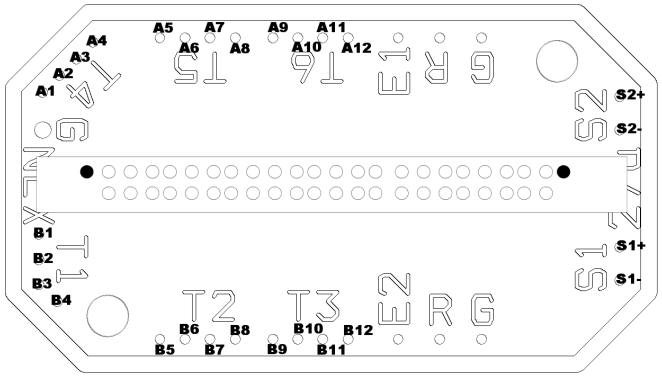
Electrode Connection

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-27 micro uses the Small EIB Pins (0.03cm/0.012").

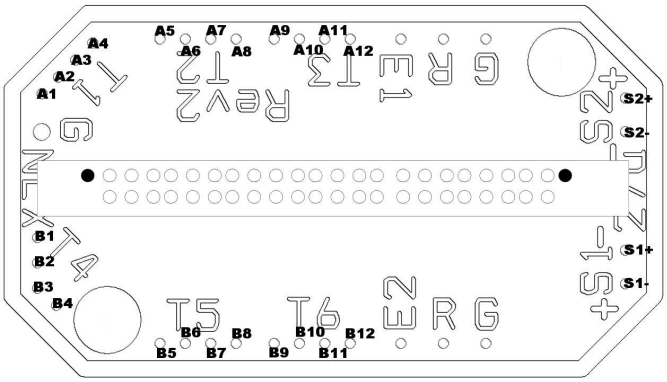
WARNING: If stimulus lines are connected to electrodes, ensure they are not shorted to +5V before turning on headstage power. Failure to check this may result in paralysis or death of the test subject.

EIB Reuse

Reuse of the EIB-27 micro is not recommended, but is possible. If reuse of the EIB-27 micro is required, please contact Neuralynx for assistance.



EIB-27 micro Rev1: Pin Layout (Top View)



EIB-27 micro Rev2: Pin Layout(Top View)

Technical Specifications:

Size (LxWxH)	2.0cm x 1.1cm x 0.6cm
Weight	220mg
Signals	• 24 electrodes • 3 Ground (G) • 2 References (R) • 2 Extra EEG channels (E1, E2) • 2 Differential Stimulus channels (S1-, S1+, S2-, S2+)
Connections	• 35 0.03cm Vias • Omnetics 44 pin
Mounting Screw Diameter	0.13cm