



EIB-27: Pin Layout (Top View)

The Electrode Interface Board (EIB-27) is mounted to microdrive hardware and provides the electronic signal connection between electrode wires and a 27 channel Neuralynx Headstage Pre-amplifier (HS-27 and HS-27M). The EIB-27 also provides mechanical connection between microdrive hardware and the HS-27 or HS-27M.

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

### HS-27/HS-27M Connection

The HS-27 and HS-27M are connected to the EIB-27 with double row header pins. Both headstages have a blue power LED on one face of the headstage. The power LEDs should face towards the top of the EIB-27 where *Neuralynx ©1999* is printed on the board.

### EIB-27 Mounting

The EIB-27 is designed for mounting on a microdrive. Use the screw holes (on the right and left) to mount the EIB-27 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 uses the Large EIB Pins (0.05cm/0.021”).

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

### Technical Specifications:

<b>Size (LxWxH)</b>	3.3cm x 0.8cm x 0.7cm
<b>Weight</b>	1.54g
<b>Signals</b>	<ul style="list-style-type: none"> <li>• 24 electrodes (A1→A12, B1→B12)</li> <li>• 2 Ground</li> <li>• 1 Reference</li> <li>• 2 Differential Stimulus (S1-, S1+, S2-, S2+)</li> <li>• 2 Extra EEG channels (E1, E2)</li> </ul>
<b>Connections</b>	<ul style="list-style-type: none"> <li>• 33 0.05cm Vias</li> <li>• Milmax 36pin</li> </ul>
<b>Mounting Screw Diameter</b>	0.25cm