

# EIB-36: 36 Channel Electrode Interface



The Electrode Interface Board (EIB-36) 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-36 also provides mechanical connection between microdrive hardware and the HS-36.

The EIB-36 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-36 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-36 Mounting**

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

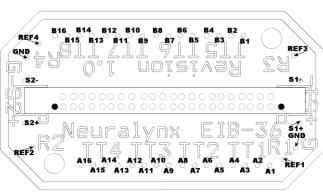
## **Electrode Connection**

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-36 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.

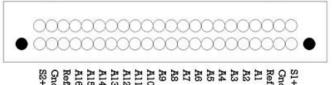
#### **EIB Reuse**

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



EIB-36: Pin Layout (Top View)

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EIB-36: Omnetics 44pin (Close Up)

# **Pin Mapping**

The EIB-36 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)	2.0cm x 1.1cm x 0.6cm
Weight	564mg
Signals	<ul> <li>32 electrodes (A1→A16, B1→B16)</li> <li>2 Ground (GND)</li> <li>4 References (REF1→REF4)</li> <li>2 Differential Stimulus channels (S1-, S1+, S2-, S2+)</li> </ul>
Connections	<ul><li>42 0.03cm Vias</li><li>Omnetics 44 pin</li></ul>
Mounting Screw Diameter	0.13cm