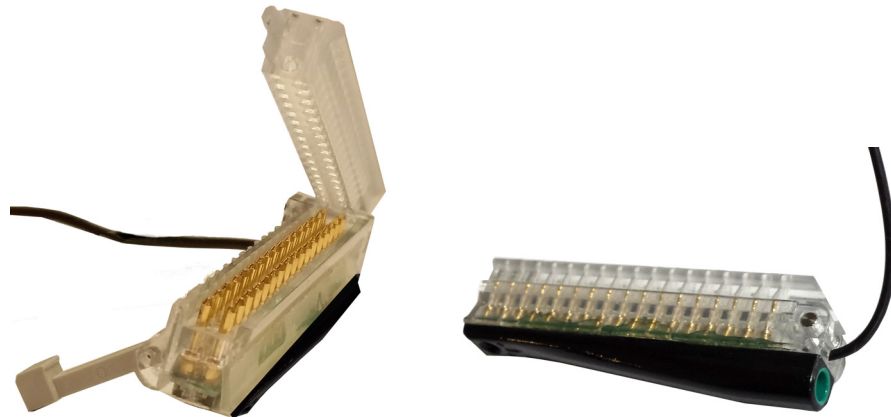


# ECoG Headstages

## CB16-PMT - 16 Channel ECoG Headstage

The 16 Channel ECoG headstages are recommended for 13 gauge tunneling needle/ inline tail probes with impedance ranging from 20 kOhm to 5 Mohm. The headstage includes a Touch Proof connector for optional reference input and a locking bar for secure connection of probe to headstage.

The CB16-PMT is available as a passive or active headstage.



CB16-PMT Connector - Open / Closed, View from Bottom

### Part Numbers:

CB16-PMT - 16 Channel Active Headstage for Z-Series (PZ) PreAmps

CB16P-PMT - 16 Channel Passive Headstage for Z-Series (PZ) PreAmps



The headstage has sensitive electronics. Always ground yourself before handling.

## Headstage Voltage Range

**When using a TDT preamplifier the voltage input range of the preamplifier is typically lower than the headstage and must be considered the effective range of the system. Check the specifications of your amplifier for voltage range.** Also keep in mind that the range of the headstage varies depending on the power supply provided by the preamplifier. TDT preamplifiers supply  $\pm 1.5$  V, but third party preamplifiers may vary. TDT recommends using preamplifiers which deliver  $\pm 2.5$

V or less. Check the preamplifier voltage input and power supply specifications and headstage gain to determine the voltage range of the system.

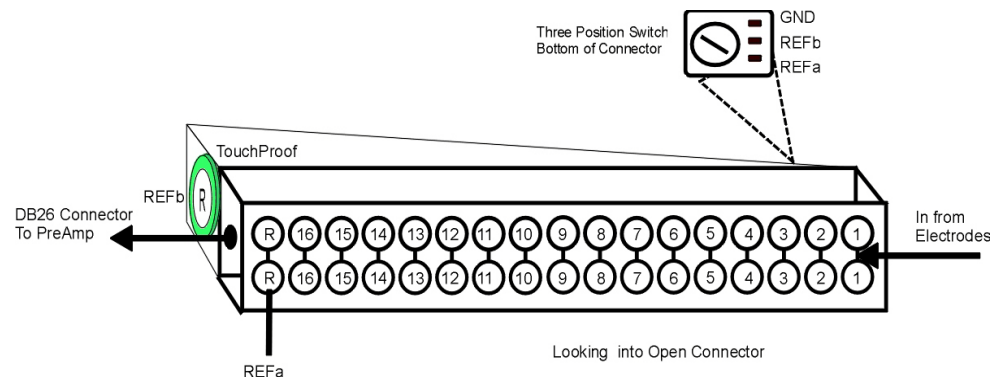
The table below lists the input voltage ranges for the 16 channel ECoG headstages for either a  $\pm 1.5$  V or  $\pm 2.5$  V power source.

	Headstage input range when using $\pm 1.5$ V power source	Headstage input range when using $\pm 2.5$ V power source
CB16-PMT	-1.5 to 1.4 V	-2.5 to 2.4 V

## Technical Specifications

<b>Input Referred Noise</b>	rms 3 $\mu$ V bandwidth 300-3000 Hz rms 6 $\mu$ V bandwidth 30-8000 Hz
<b>Headstage Gain</b>	Unity (1x)
<b>Input Impedance</b>	$10^{13}$ Ohms

## Pinout



The numbers on the pinout diagram above show the channel connections to the amplifier.

A three position switch is used to connect either REFa, REFb, or GND to the REF line on the DB26 PreAmplifier/Digitizer connector.

The headstage does not provide access to ground and instead relies on the use of the external ground on the preamplifier/digitizer.