

SS72L MICROELECTRODE AMPLIFIER



The SS72L very high impedance (Z_{in}), single-ended input amplifier is fully shielded and operates with glass or wire electrodes. It is suitable for intracellular or extracellular measurements. The frequency response of the SS72L ranges from DC to 3000 Hz.

The SS72L input directly supports a variety of plug-in adapters to connect to a wide range of glass or wire electrodes, and includes an adapter to connect to glass microelectrodes with 2 mm female socket connection (i.e., A-M Systems 67604x series). The adapter firmly holds the glass microelectrode, so positioning can be handled via the support rod. The Ground input is on the bottom; one alligator clip lead (LEAD140) is included as an option for GND.

The SS72L Micro Electrode Amplifier can connect to any MPXX platform:

- MP36/MP36R/MP35/MP45: Connect directly to any input channel.
- MP160/150 System: Connect via DA100C and TCI114.

Specifications

Gain:	2
Input:	Single-ended, JFET type
Input Connector:	Touchproof male socket (1.5 mm pin diameter)
Input Ground Connector:	Touchproof male socket (1.5 mm pin diameter)
Adapter:	4.8 cm long, 4.5 mm diameter, Touchproof female (1.5 mm socket) to 2 mm male pin
Offset voltage:	0.05 mV nominal
Input bias current:	0.25 pA nominal
Input voltage range:	± 1 V with MP36/MP36R/MP35/MP45; ± 100 mV with MP160/150 via DA100C + TCI114 <i>For wider input voltage range using MP160/150 System and SS72L, contact BIOPAC</i>
Noise voltage:	2.5 μ V p-p (0.1-10 Hz)
Noise voltage density:	16 nV/sqrt (Hz)
Noise Current Density:	0.5 fA/sqrt (Hz)
Output:	Single-ended or differential
Output Connector:	Connects directly to MP36/MP36R/MP35/MP45; requires DA100C + TCI114 to MP160/150
Bandwidth	DC-3000 Hz, single poll roll-off
Shielded:	Yes, connects to MPXX ground pin
Input Impedance:	1 Gohm nominal
Power:	± 5 V (from MPXX platform)
Cable Length:	3 m (10')
Dimensions:	Support Rod: 10 cm long, 0.635 cm diameter Amplifier casing (shielded): 6.91 cm long, 3.175 cm diameter

SS72L Example Setups

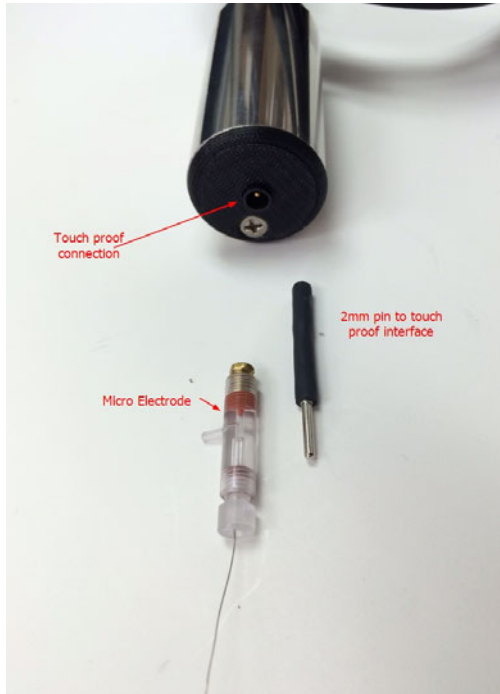


Figure 1



Figure 2



Figure 3

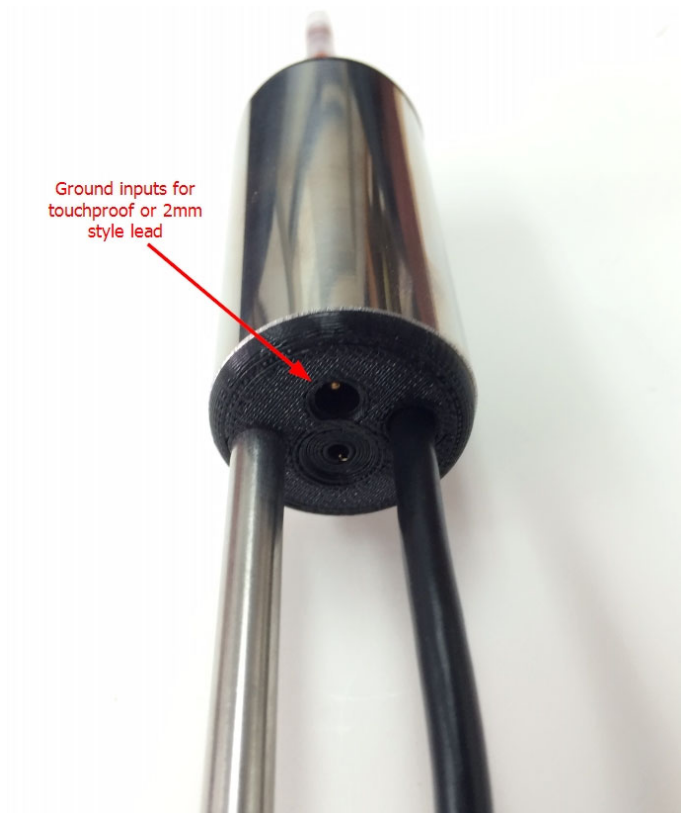


Figure 4