We developed a multipurpose low noise amplifier system for extracellular recordings with multielectrode arrays (MEA) and field-effect transistors (FET). The multi-channel amplifier system consists of a main amplifier and an exchangeable preamplifier stage fitting to the device type. The preamplifier adapts to the chip type and allows the parallel recording of up to 64 channels. The system was successfully used for extracellular recordings of action potentials. Ongoing development is focused on the development of an ultra-low noise multi-channel head stage for transistor devices.

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