

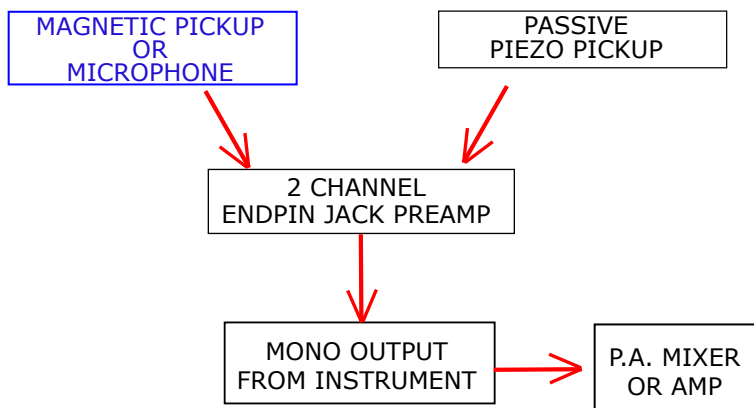
## Combining A Magnetic Pickup or Mic With A Passive Piezo Pickup

Some basic information first:

- 1) The average magnetic pickup has an impedance of approx. 7k ohms (7,000 ohms).
- 2) The average microphone has an impedance of 1k ohms (1,000 ohms) or less.
- 3) A passive non-preamped piezo pickup has an impedance of approx. 1.5 M ohms (1,500,000 ohms).

Due to the vast differences in the impedances between these three devices, in order to be able to balance their output levels, it is necessary to run each signal through a preamp stage to change the impedances and allow for the adjustment of the output level for each pickup. This is done by using a two channel endpin jack preamp like our Artist II, or by using a two channel outboard preamp such as our Premap/DI Max.

Example 1



Example 2

