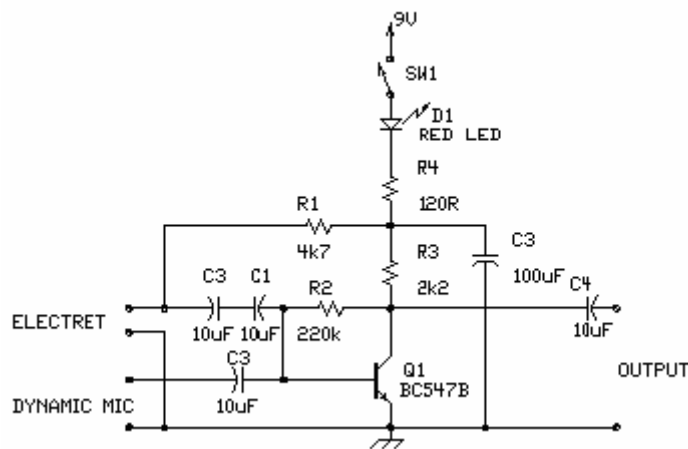


# Simple microphone preamplifier

This is a simple microphone preamplifier circuit which you can use between your microphone and stereo amplifier. This circuit amplifier microphone suitable for use with normal home stereo amplifier line/CD/aux/tape inputs. This mic preamp can take both dynamic and electret microphone inputs (preamplifier provides power for electret microphone elements). The idea of this circuit is to keep the design as simple as possible to be easy to build. That was my goal when I needed a simple external microphone preamplifier for my mixer. The performance of the circuit is nothing superior but can be used with many not so serious projects.



The circuit is a simple one transistor amplifier with amplification of about 30-40 dB (depends on transistor, temperature and voltage). The dynamic mic input is just a simple one transistor amplifier circuit with nothing special. Electret microphone input has a resistor R1 for feeding current through electret microphone capsule when it is connected to the electret microphone input. Electret microphone needs some current (about 1 mA) flowing through it to operate, because there is a small amplifier circuit inside the microphone capsule. This circuit is suitable for all typical cheap electret capsules which are available from any electronic component shop. Because electret microphones have higher signal level output, it is quite easy to overdrive the amplifier when you shout to electret microphone.

The circuit is best to build to a small metal box where you have a small 9V battery for powering it. Battery power and metal box keep noise away.