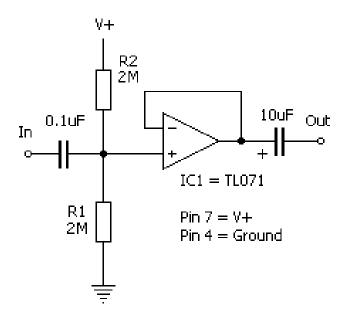
IC Buffer

Based on a design from Jack Orman, slightly modified by Andreas Möller!

More details can be found at www.muzique.com/lab/buffers.htm

An opamp is an even better buffer amplifier than a JFET, though many believe they are somewhat colder sounding and more sterile than the transistor versions. The opamp gain is exactly unity and the output impedance is quite low; typically measured in tens of ohms instead of hundreds as with the transistors. It also has the lowest parts count of any of the simple buffers presented here.

Voltage divider biasing is also possible with the opamp and the input impedance is calculated the same way as with the transistor versions similarly biased.



The voltage divider biasing circuit is ideal, simply because you don't need to add a section to produce the control voltage. I changed the two resistors to 2M instead of 1M. That way, you get a 1M input impedance, which is good enough for guitar use. Using two 1M resistors will only give you 500K input impedance, which can sometimes be a little on the low side of safe.