Audio VU Meter

Description:

This circuit uses two quad op-amps to form an eight LED audio level meter. The op-amp used in this particular circuit is the LM324. It is a popular IC and should be available from many parts stores.



Notes:

The 1K resistors in the circuit are essential so that the LED's turn on at different audio levels. There is no reason why you can't change these resistors, although anything above 5K may cause some of the LED's to never switch on. This circuit is easily expandable with more op-amps, and is not limited to use with the LM324. Pretty much any op-amp will work as long as you look up the pinouts and make sure everything is properly connected.

The 33K resistor on the schematic is to keep the signal input to the circuit at a low level. It is unlikely you will find a 33K resistor, so the closest you can get should do. The value of this resistor may need to be changed, so it is best you breadboard this circuit before actually constructing it on PCB. The circuit in it's current form will accept line level inputs from sources such as the aux out on a Hi-Fi, all though could be easily modified to accept speaker inputs.

The audio + is connected to the main positive rail, while the audio - is used for signal input. The 50k pot can be used to vary the sensitivity of the circuit.