

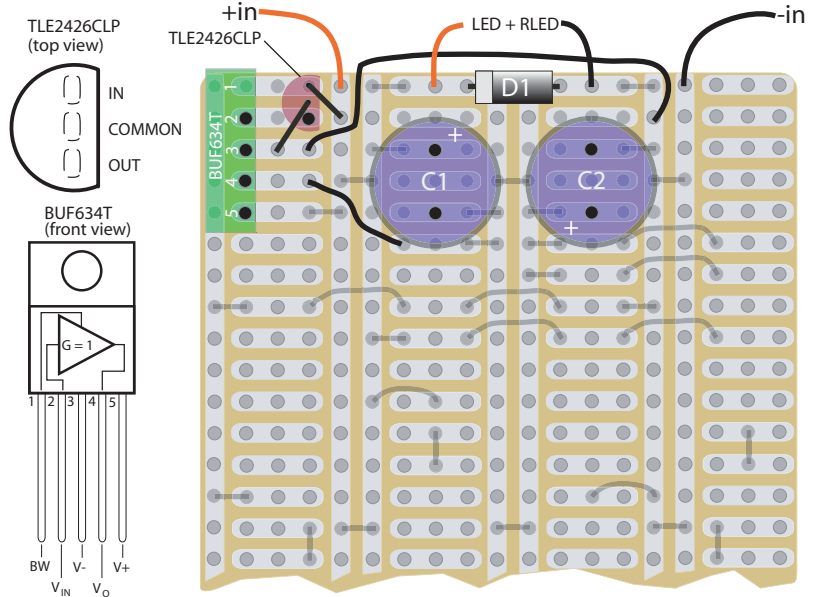
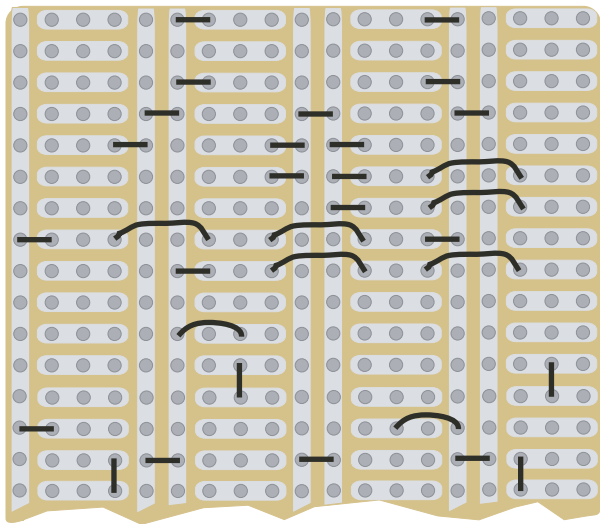
# Grado A47 Headphone Amp

Assembly and Schematic by Benjamin Feist [bf@feistworks.com](mailto:bf@feistworks.com)  
 Based on The Apeared 47 amplifier as seen on [headwize.com](http://headwize.com)

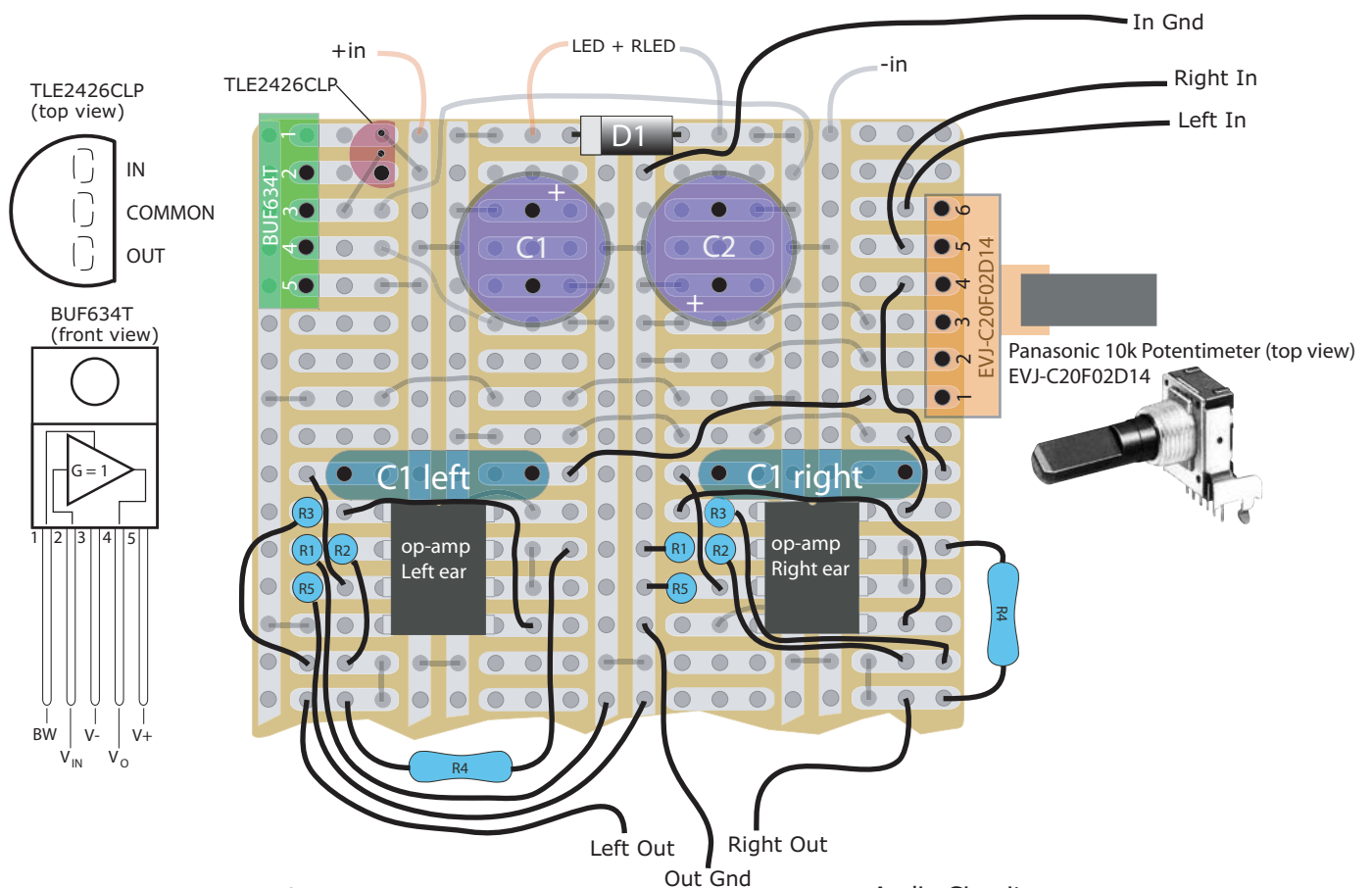
This headphone amplifier is ideal for driving Grado ([www.gradolabs.com](http://www.gradolabs.com)) headphones or other low impedance headphones (33-50 Ohms). It has a gain of roughly 6 with the resistor values as shown. The OPA2134 chip was chosen after trying many others in this topology--IMHO it sounds the best. All parts can be ordered from [digikey.com](http://digikey.com). See [tangentsoft.net](http://tangentsoft.net) for information on parts selection for the CmoY Amp--almost all of the parts are the same as those needed for this amp. It is best to drive the amp with 15-20V. A wall wart works well if you don't need portability. Good Luck!

1. Cut a piece of protoboard as shown below. Radio Shack #276-150. Add jumpers as shown.

2. Add the power circuit. The TLE2426CLP and BUF634 pin layout are provided to the left of the diagram below. TLE2426CLP is missing pin 8 from the CP package shown in the schematic. Ignore this. Battery and power switch not shown.



3. Add the audio circuit.



Power Supply

Audio Circuit

