

# Gainclone PCB

## For LM3875 Overture Hi-Fi Audio Amplifier

## Both INVERTING and NON-INVERTING versions on the same PCB

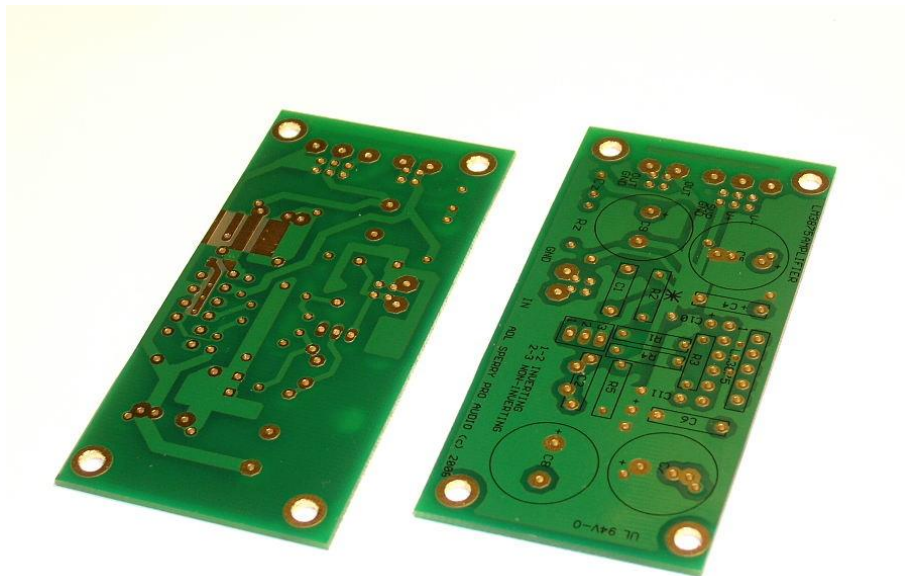
- High quality FR4 double-sided, plated-through holes, with conformal coating solder mask and black legend.
- Gold-plated on nickel substrate.
- Top side ground plane, all circuit ground points connect to the ground plane at a "star" grounding point.
- PC lands provided for SMT ceramic bypass capacitors to improve transient response.
- Both Inverting and non-inverting topologies on same PCB
- Zobel network ready
- Dimensions: 3.6" x 1.75" 92mm x 44mm

This PCB enables the building of either an inverting or non-inverting amp. Circuit traces and parts placement are provided for BOTH versions. You choose which parts you want to populate to obtain the amplifier you want. *This is the only Gainclone PCB that allows this flexibility.*

Build yourself the amplifier that sells for hundreds to thousands of dollars in various incarnations and brand names.

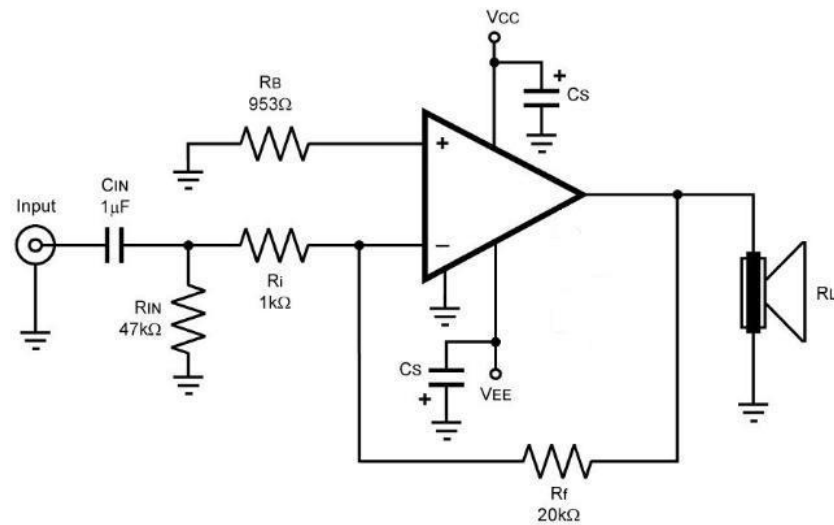
The "Gain-clone" or "Chip-Amp" stirred a great following of audiophiles, originally inspired by the "Gaincard" Amp, a product made notorious by its exceptional sound quality --and price tag--, and which used none other than the "Overture" LM3875 Amplifier IC.

below: front and back of PCB.

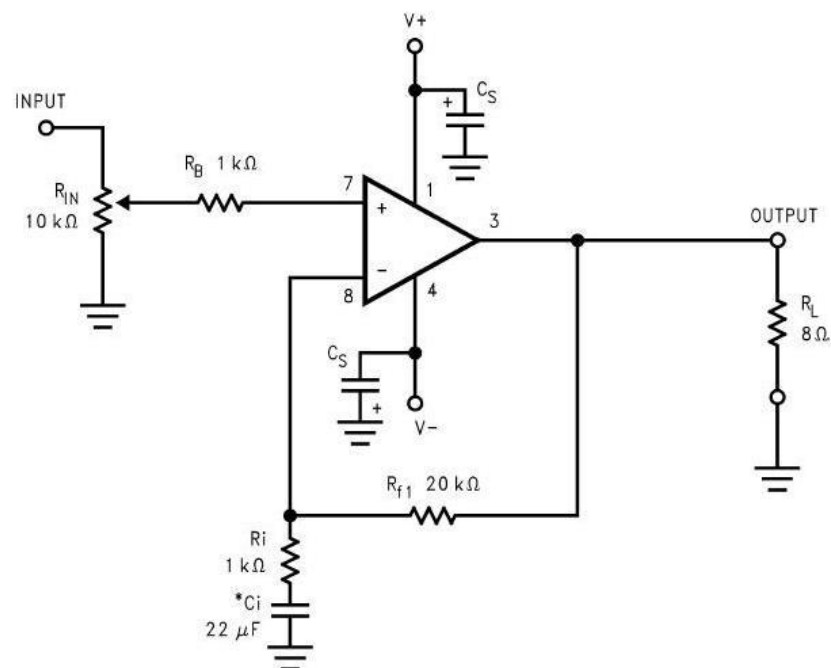


below: Schematic of the inverting amplifier implemented on the PCB

below:



Inverting Amplifier Application Circuit

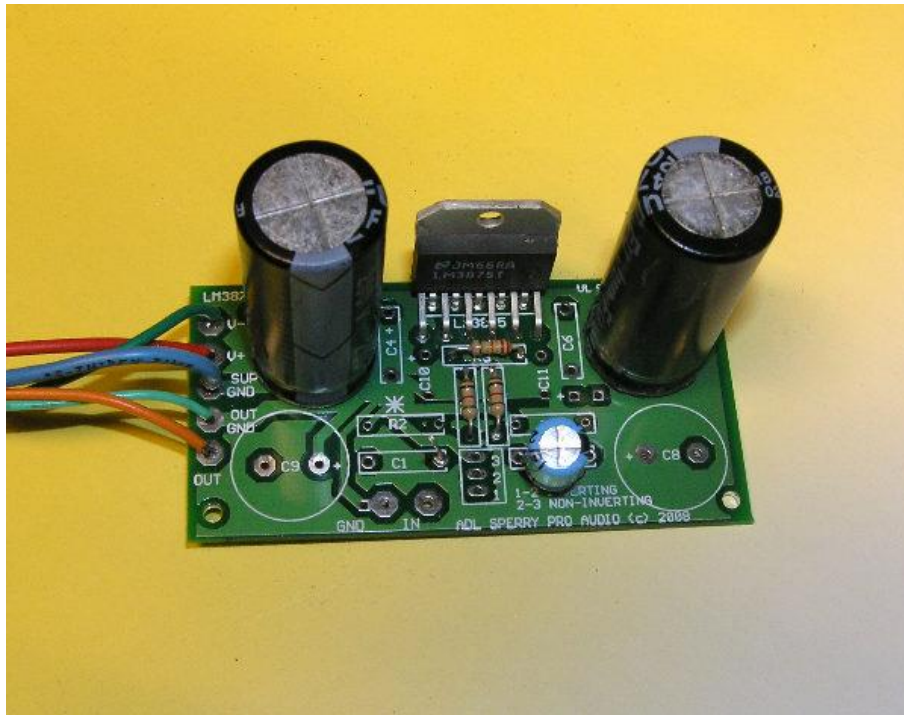


Noninverting Amplifier Application Circuit

Schematic of the non-inverting amplifier implemented on the PCB

Component positions also provided on the PCB for a Zobel network (not shown in schematics)

**BELOW: populated PCB (some components left out for better view)**



**below: the board holds the LM3875 so its back plate slightly projects outside the PCB (by 20 mils) to accommodate heat sink positioning both above and below the board.**

