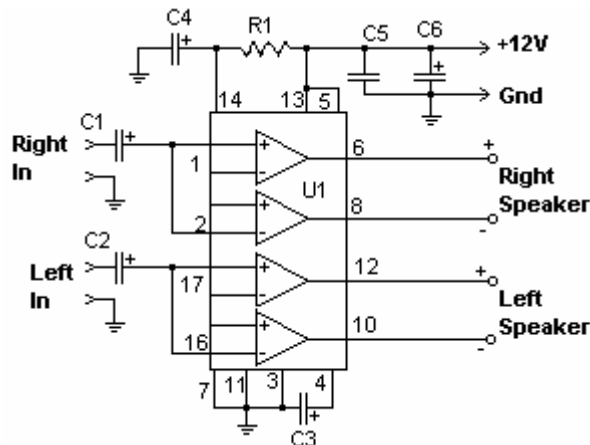


22 Watt Audio Amplifier

The 22 watt amp is easy to build, and very inexpensive. The circuit can be used as a booster in a car audio system, an amp for satellite speakers in a surround sound or home theater system, or as an amp for computer speakers. The circuit is quite compact and uses only about 60 watts. The circuit is not mine, it came from [Popular Electronics](#).

Schematic



Parts

Part	Total Qty.	Description	Substitutions
R1	1	39K 1/4 Watt Resistor	
C1,C2	2	10uf 25V Electrolytic Capacitor	
C3	1	100uf 25V Electrolytic Capacitor	
C4	1	47uf 25V Electrolytic Capacitor	
C5	1	0.1uf 25V Ceramic Capacitor	
C6	1	2200uf 25V Electrolytic Capacitor	
U1	1	TDA1554 Two Channel Audio Amp Chip	
MISC	1	Heatsink For U1, Binding Posts (For Output), RCA Jacks (For Input), Wire, Board	

Notes

1. The circuit works best with 4 ohm speakers, but 8 ohm units will do.
2. The circuit dissipates roughly 28 watts of heat, so a good heatsink is necessary. The chip should run cool enough to touch with the proper heatsink installed.
3. The circuit operates at 12 Volts at about 5 Amps at full volume. Lower volumes use less current, and therefore produce less heat.
4. Printed circuit board is preferred, but universal solder or perf board will do. Keep lead length short.