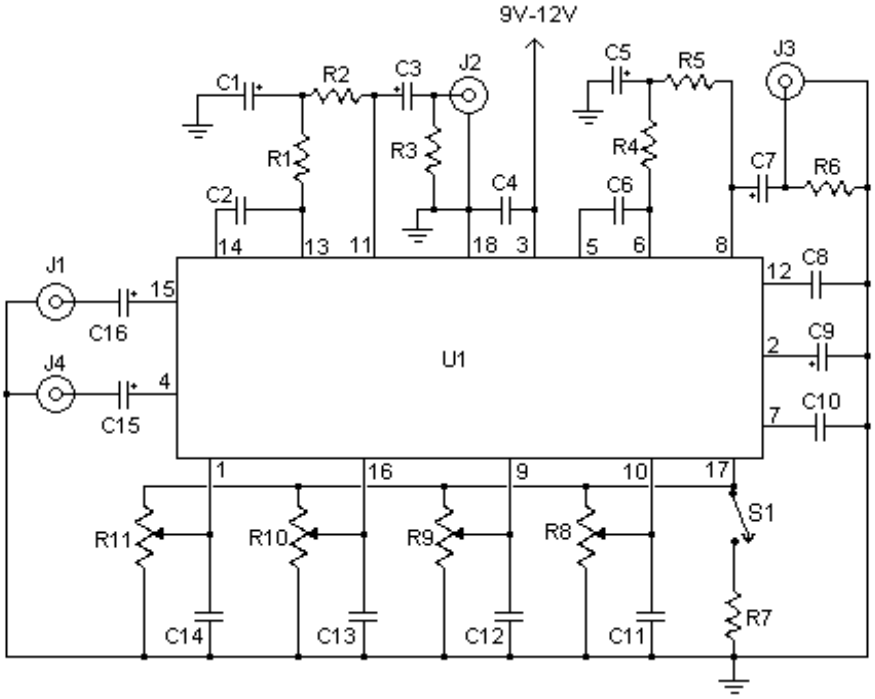
Tone Control

This simple tone control can be used in may audio applications. It can be added to amplifers, used as a stand alone control module, or even built into new and exciting instruments. It's one IC construction makes it a very compact circuit, as only a few support components are required. Plus, it does not use a dual power supply. This means that the circuit will run from 9V to 15V (although the bass will be a little weak at 9V). The circuit is by Robert Barg and originally appeared in the *Think Tank* column of the May 1998 issue of **Popular Electronics.**.

Schematic:



Parts:

Part	Total Qty.	Description	Substitutions
C1, C3, C5, C7, C15, C16	6	2.2uf Electrolytic Capacitor	
C2, C6	2	0.05uF Ceramic Disc Capacitor	
C4	1	0.22uF Disc Capacitor	
C8, C10	2	0.015uF Ceramic Disc Capacitor	
C9	1	100uF Electrolytic Capacitor	
C11, C12, C13, C14	4	0.1uF Ceramic Disc Capacitor	
R1, R4	2	10K 1/4W Resistor	
R2, R5	2	33K 1/4W Resistor	
R3, R6	2	4.7K 1/4W Resistor	
R7	1	2.2K 1/4W Resistor	
R8, R9, R10, R11	4	50K Linear Pot	
U1	1	TDA1524A Tone Control IC	
S1	1	SPST Switch	
J1, J2, J3, J4	4	RCA Jacks	Other connectors of your choice
MISC	1	Board, Wire, Knobs, 18 Pin Socket	

Notes:

1. S1 is a contour control. Volume is controlled by R11. Balance is controlled by R10. R9 and R8 control bass and treble, respectivly.

2. J1 is the left input, J4 is the right input. J2 is the left output, J3 is the right output.

3. The circuit is designed to accept line level or mic level inputs. if you are going to be using a stronger signal, a voltage divider will be necessary to cut it down to proper levels.

4. You can, of course, skip J1-J4 if you plan to integrate this circuit into another.