



Tonemaster – Germanium Booster

Based on the Dallas Rangemaster

Bill of materials

Resistors		Diode	
R1	68k	D1	1n4001
R2	3k9		
R3	470k	Transistor	
R4	1meg	U1	Germanium PNP
Capacitors		IC	
C1	220nf (224)	U2	Charge Pump (tc1044scpa)
C2	10nf (103)		
C3	220nf (224)	Potentiometer	
C4	10uf	Volume	10ka (16mm Log Pot)
C5	100uf	Tone	100kb (16mm Log Pot)
C6	10uf		
C7	47uf		

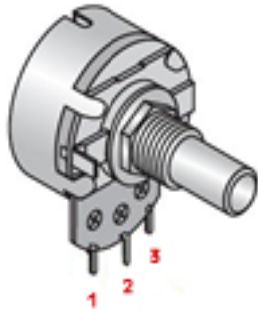
About

The Tonemaster is a germanium transistor booster based on the Dallas Rangemaster. Unlike other Rangemaster based effects the Tonemaster includes a tone control so it will act as more than just a treble boost and can give you a full range boost! Onboard charge pump is included to save you the hassle of a separate power inverter board. The PCB is small in size and may be able to fit into a 1590A enclosure (yet to be confirmed).

Tone mod

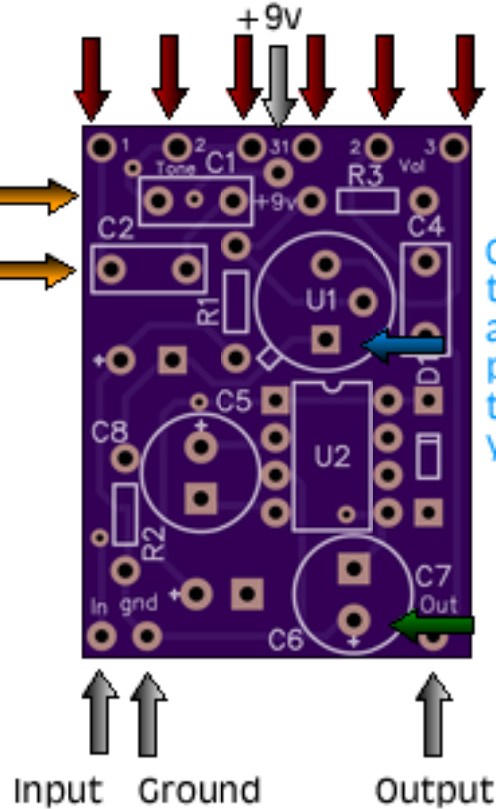
Changing the values of c1 and c2 will change the frequency range of the Tone Control

*Note: This PCB spacing is **not compatible** with the NOS Russian Passive sets available in the store. Please use madbeans rangemaster pcb for use with these sets*



Note the numbers on the PCB (1,2,3) should be matched to the numbers on the pot. Pots with mounting lugs can be soldered directly to the PCB

C1 & C2 set the upper and lower limit of the tone control. Experiment with these values



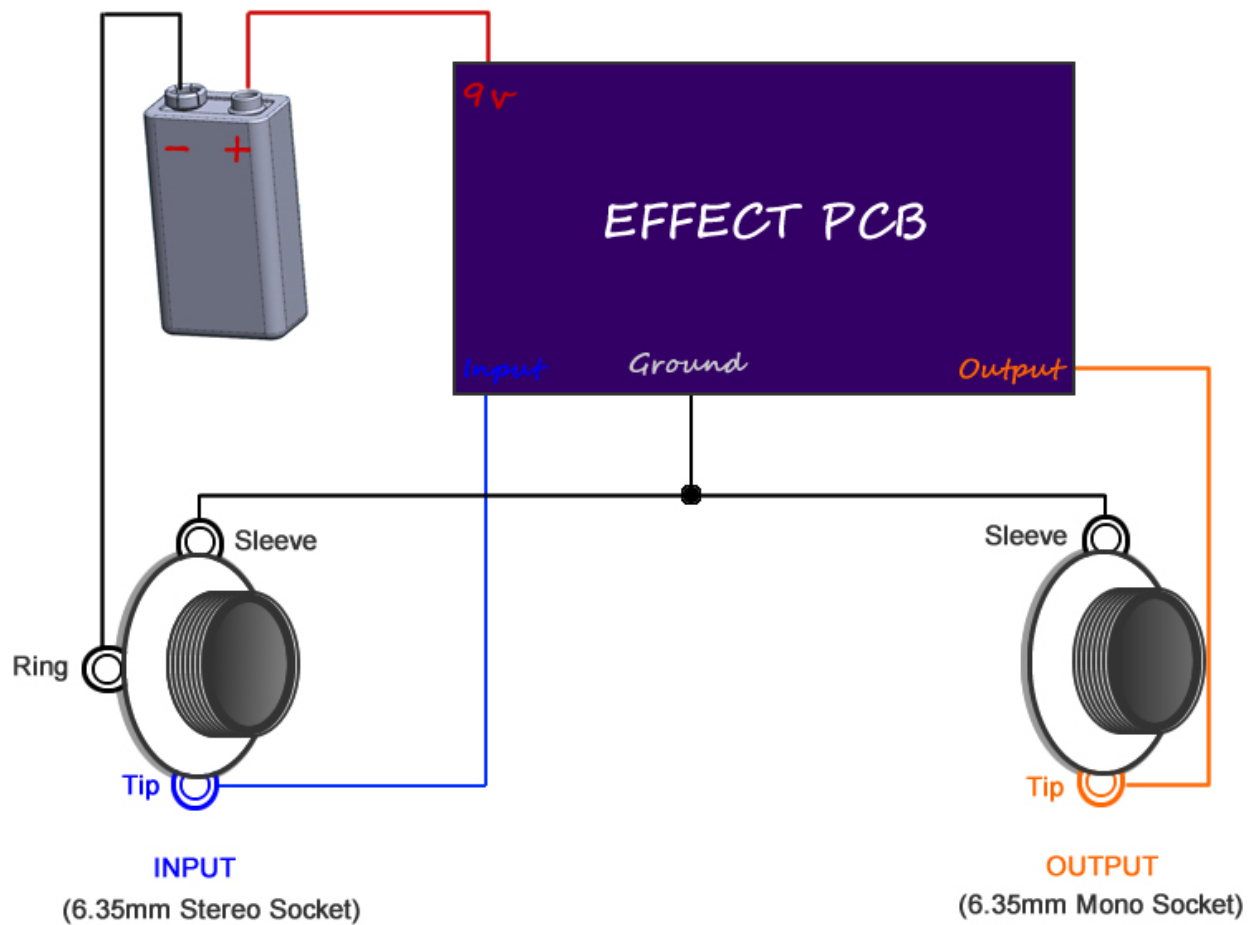
Check the pinout of the transistor you are using. The square pad on the layout indicates the emitter. Use a socket if you plan to experiment!

Pay close attention to cap polarity

Input Ground Output

Testing Your Effect

Using aligator clips or soldering directly, wire your effect as in the following...



Input and Output Sockets

Pay close attention to the lugs of your sockets. Look at them side on so that you can distinguish the sockets individual layers. For instance the tip lug is connected to tip contact. The stereo jack looks the same as the socket below except it has an extra lug and contact for "Ring".

