

# Dr. Boogey by electrictabs

gaussmarkov

December 14, 2007

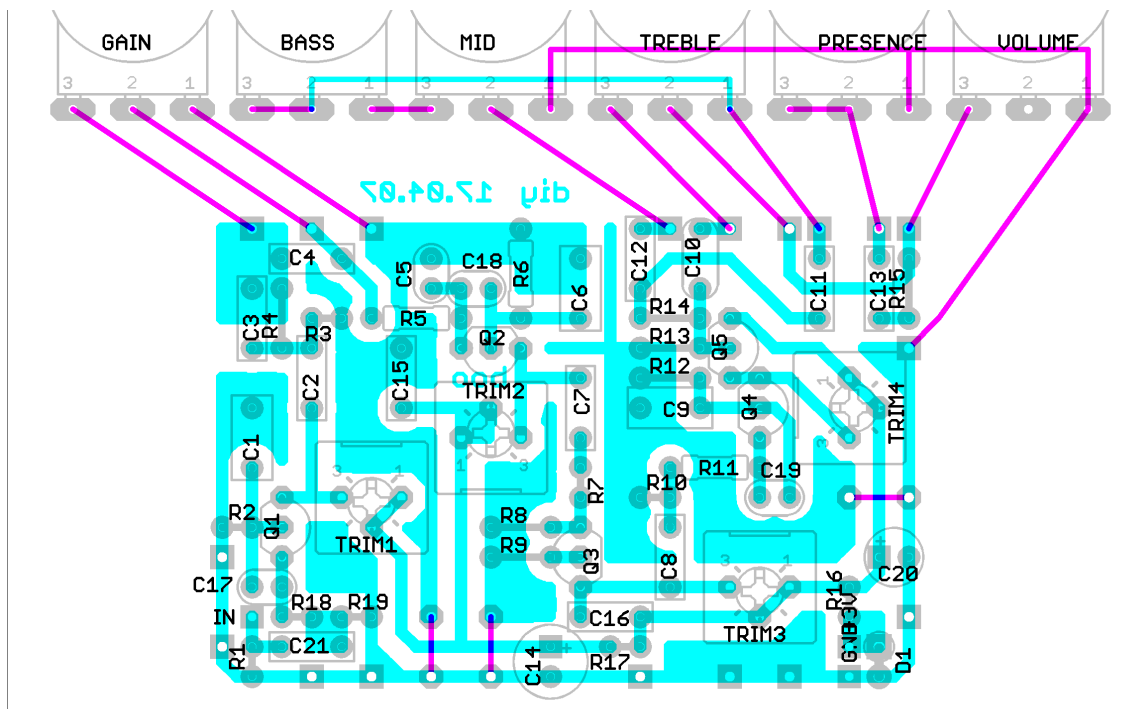
<http://gaussmarkov.net/index.php?page=layouts#drboo>

## Notes

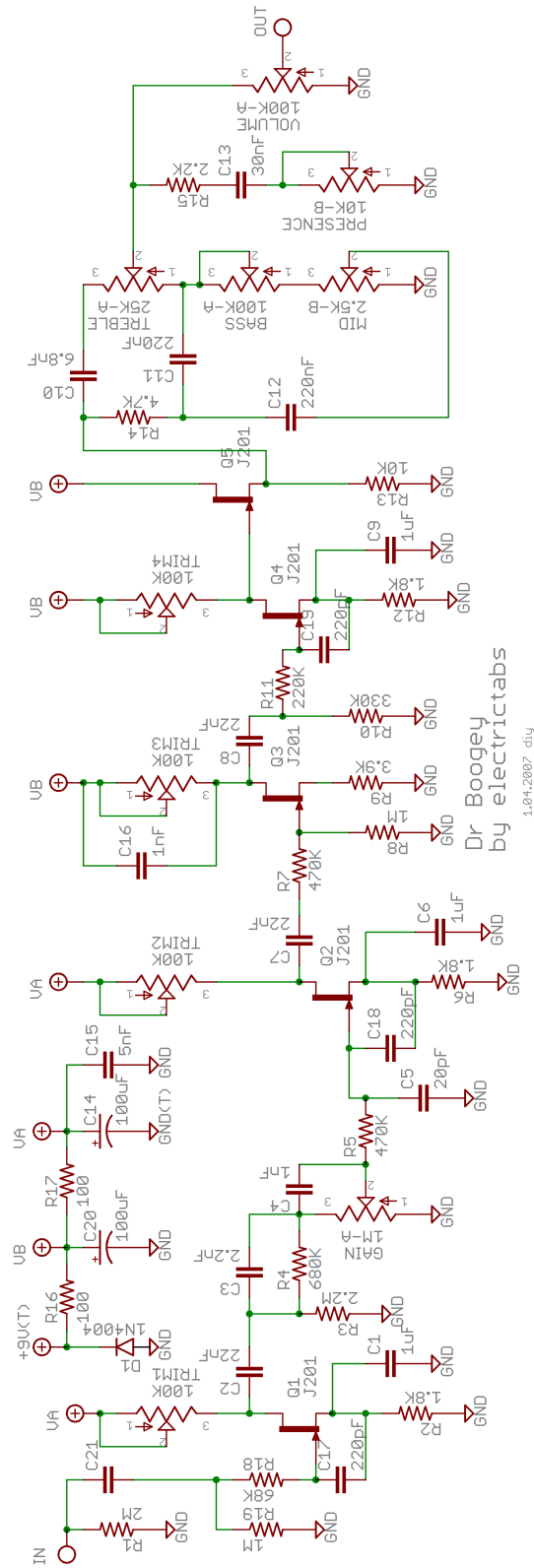
SOURCE: <http://geocities.com/electrictabs/dr.boogey.png>

This is electrictab's pedal emulation of the Mesa Boogie Dual Rectifier Solo Head. This circuit has been heavily discussed on [Aron's DIY forum](#) and the contents of this project are the result of a diystompboxes.com community effort. Compared to the original, "miller capacitors" (C17, C18, C19 in the schematic), an input coupling capacitor (C21), an input filter resistor (R18), polarity protection (D1), and power supply filtering (R16, R17, C20) have been added. This layout has also been worked out by forum participants. It features star grounding, guard traces, simplified signal path, and side-by-side supply rails. Also, the tone section has been rescaled by a factor of 10 to reduce output impedance. For additional information, see [this thread](#).

## Layout



# Schematic



## Parts List

C1	1uF	gm-caps-film-box	R1	2M	gm-resistors
C2	22nF	gm-caps-film-box	R2	1.8K	gm-resistors
C3	2.2nF	gm-caps-film-box	R3	2.2M	gm-resistors
C4	1nF	gm-caps-film-box	R4	680K	gm-resistors
C5	20pF	gm-caps-ceramic	R5	470K	gm-resistors
C6	1uF	gm-caps-film-box	R6	1.8K	gm-resistors
C7	22nF	gm-caps-film-box	R7	470K	gm-resistors
C8	22nF	gm-caps-film-box	R8	1M	gm-resistors
C9	1uF	gm-caps-film-box	R9	3.9K	gm-resistors
C10	6.8nF	gm-caps-film-chicklet	R10	330K	gm-resistors
C11	220nF	gm-caps-film-box	R11	220K	gm-resistors
C12	220nF	gm-caps-film-box	R12	1.8K	gm-resistors
C13	30nF	gm-caps-film-box	R13	10K	gm-resistors
C14	100uF	gm-caps-electro-pol	R14	4.7K	gm-resistors
C15	5nF	gm-caps-film-box	R15	2.2K	gm-resistors
C16	1nF	gm-caps-film-box	R16	100	gm-resistors
C17	220pF	gm-caps-ceramic	R17	100	gm-resistors
C18	220pF	gm-caps-ceramic	R18	68K	gm-resistors
C19	220pF	gm-caps-ceramic	R19	1M	gm-resistors
C20	100uF	gm-caps-electro-pol	BASS	100K-A	gm-pots
C21	.1uF	gm-caps-film-box	GAIN	1M-A (or 500K)	gm-pots
D1	1N4004	gm-diodes	MID	2.5K-B	gm-pots
Q1	J201	gm-trans	PRESENCE	10K-B	gm-pots
Q2	J201	gm-trans	TREBLE	25K-A	gm-pots
Q3	J201	gm-trans	TRIM1	100K	gm-pots
Q4	J201	gm-trans	TRIM2	100K	gm-pots
Q5	J201	gm-trans	TRIM3	100K	gm-pots
			TRIM4	100K	gm-pots
			VOLUME	100K-A	gm-pots

## PCB Image

When printing this image, use “Page Scaling: None” in the Adobe Reader print dialog.

