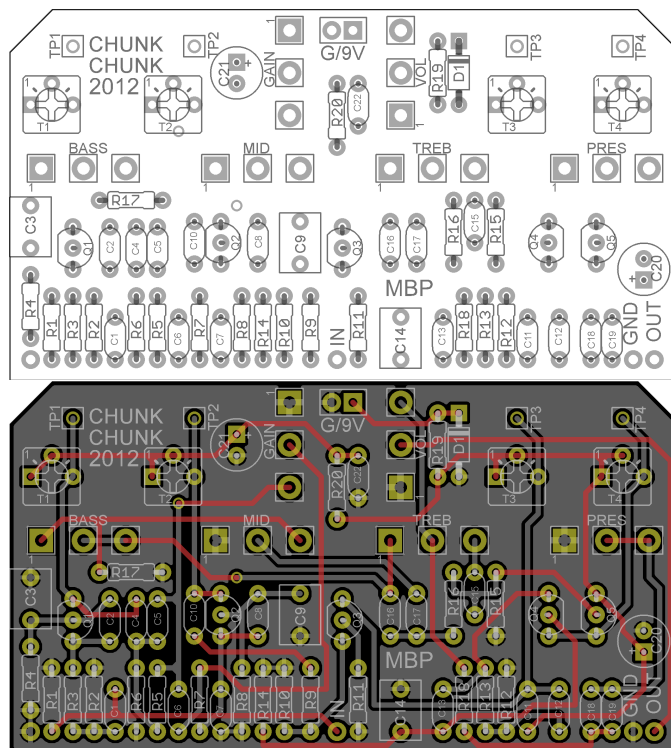


CHUNK CHUNK

FX Type: Distortion
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Released: 05.2012
3.175"W x 1.75"H

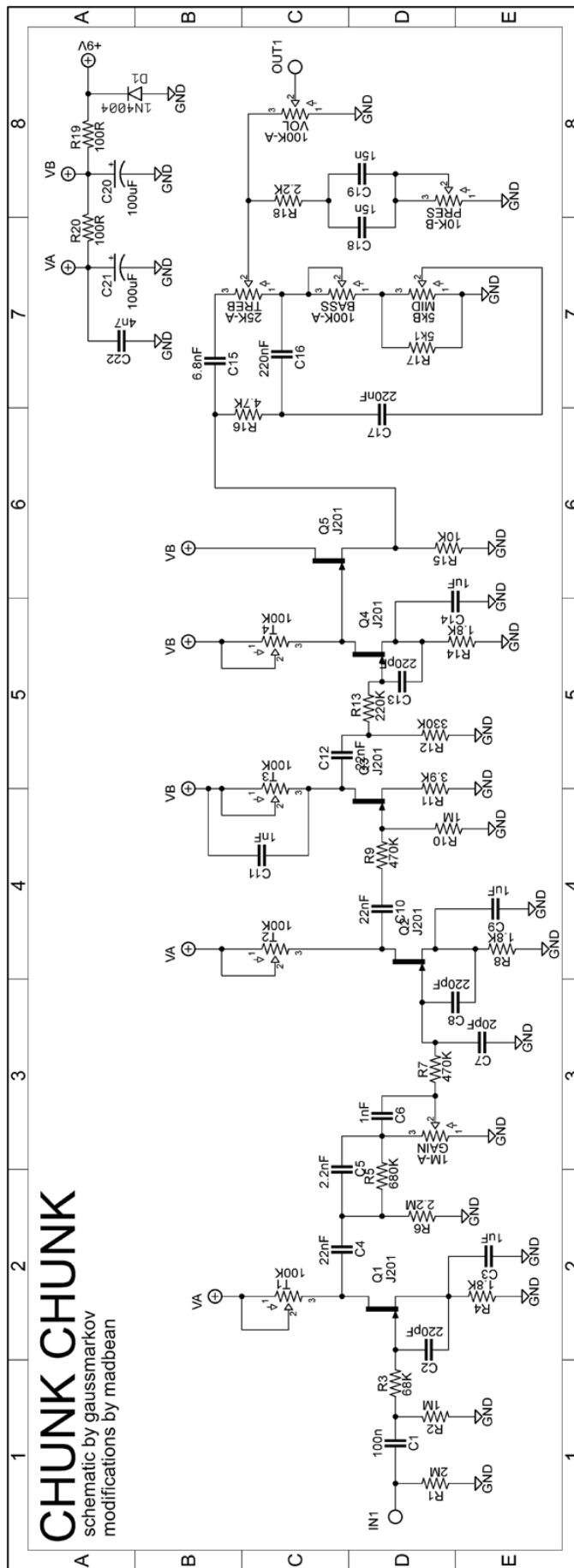


Download the previous version of the Chunk Chunk [here](#).

Bill of Materials

Resistors		Caps		Diodes	
R1	2M	C1	100n	D1	1N4004
R2	1M	C2	220pF	Transistors	
R3	68K	C3	1uF	Q1 – Q5	J201
R4	1.8K	C4	22nF	Trimmers	
R5	680K	C5	2.2nF	T1 – T4	100K
R6	2.2M	C6	1nF	Pots	
R7	470K	C7	20pF	TREB	25K-A
R8	1.8K	C8	220pF	VOL	100K-A
R9	470K	C9	1uF	GAIN	1M-A
R10	1M	C10	22nF	MID	5kB
R11	3.9K	C11	1nF	PRES	10K-B
R12	330K	C12	22nF	BASS	100K-A
R13	220K	C13	220pF		
R14	1.8K	C14	1uF		
R15	10K	C15	6.8nF		
R16	4.7K	C16	220nF		
R17	5.1k	C17	220nF		
R18	2.2K	C18	15n		
R19	100R	C19	15n		
R20	100R	C20	100uF		
		C21	100uF		
		C22	4n7		

Schematic



Overview

The Dr. Boogey has a long history in the DIY community as a sort of “rite of passage” build. If you’ve been building pedals for more than a couple of years, there’s a good chance you will build this, if only because of peer pressure :)

This is a high gain, JFET-based distortion with a TMB tone control and added presence control. It’s an attempt to model a Dual Rectifier type amp, such as [the Mesa Boogie™ Mark](#) series. The Chunk Chunk follows straight from the schematic drawing done by [Guassmarkov](#) and with only slight modifications. If you are interested in finding out more about this circuit and its history, a good place to start is with a search on [DIYStompboxes](#). There you will find many examples and build reports of the Dr. Boogie in its various forms.

GAIN: This control changes the overall distortion produced.

BASS, TREBLE MID: These controls are very typical of a TMB control you would find on an amp, with the exception of reduced values on the pots to lower the overall output impedance of the tone section.

PRESENCE: This control reduces some lower mid-range to emphasize upper mid-range frequencies.

VOL: The output level.

Notes

- You will need to bias the J201’s for optimal gain. This version of the **ChunkChunk** PCB has four test points (labeled **TP1-TP4**) at the top which correspond to the drains of **Q1-Q4**. Using your DMM, adjust the trimmer for **T1** until you read approximately 4.5v on **TP1**. Repeat for **T2-T4**. Q5 is a buffer and requires nothing further.
- You can use shielded wire on the input and/or output to reduce noise.
- You can use a 2M2 in place of the 1M pulldown resistor for **R1**.
- **C18** and **C19** are two 15n caps in parallel to add up to the 30n that is listed in the stock Dr. Boogie.
- The stock Boogie lists 2.5kB for the **MID** pot. The **Chunk Chunk** uses a 5kB instead with a 5k1 resistor in parallel to attain an effective value of 2.5k
- You can lower the overall distortion produced by substituting 2N5457 for all the transistors.

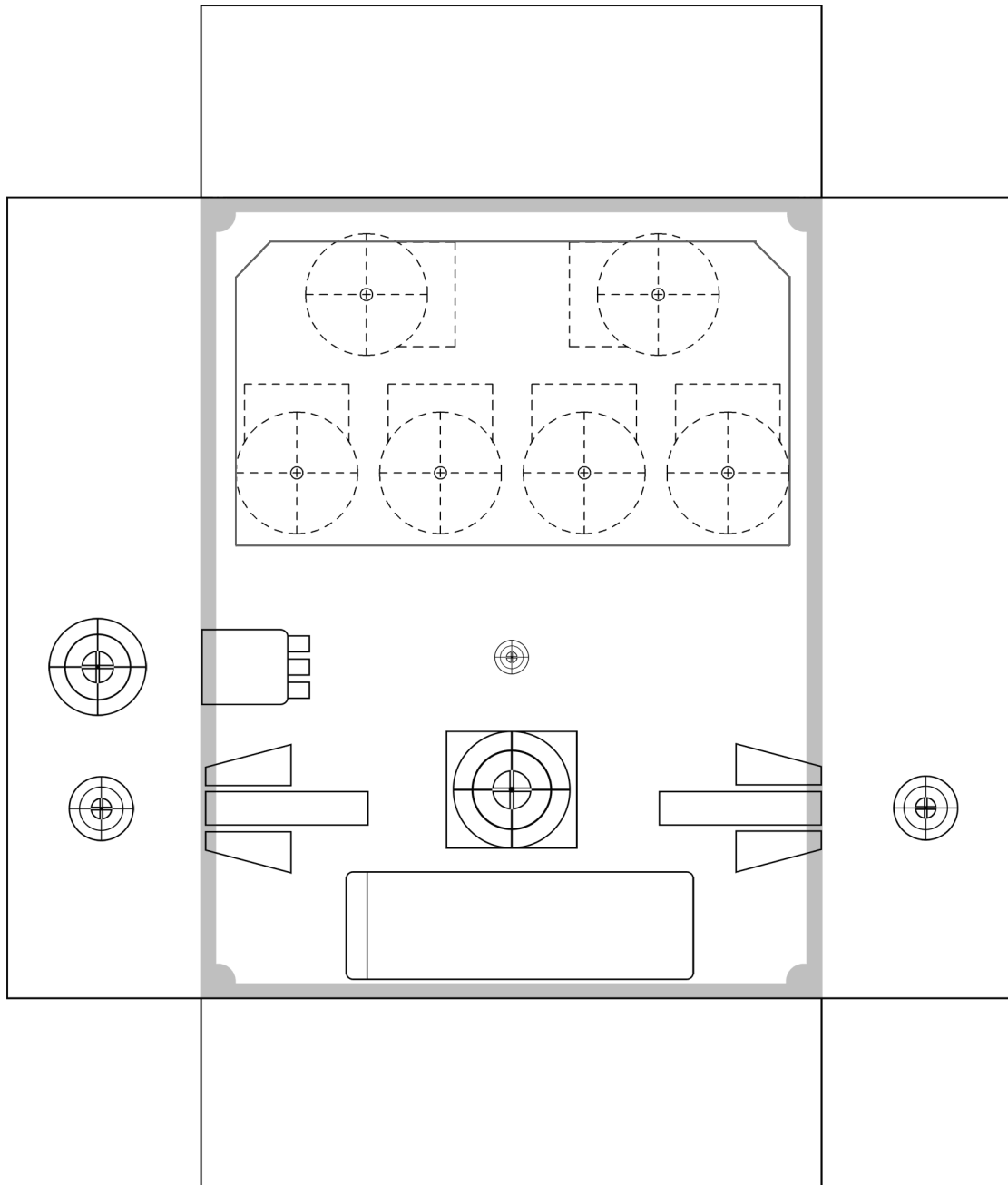


If, after biasing Q1-Q4, you encounter oscillation at high gain settings, adjust T1 some more until it is eliminated.

Drilling Template

1590BB

Image size – 5.8" x 6.8"



Licensing

Chunk Chunk PCBs purchased from madbeanpedals may be used for limited quantities of commercial pedal building (keep in mind that bulk discounting on PCBs is not offered). You may not, however, offer PCBs for commercial resale (re-distribution) or as part of a "kit". Selling and trading through DIY forums is, as always, completely legit.

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