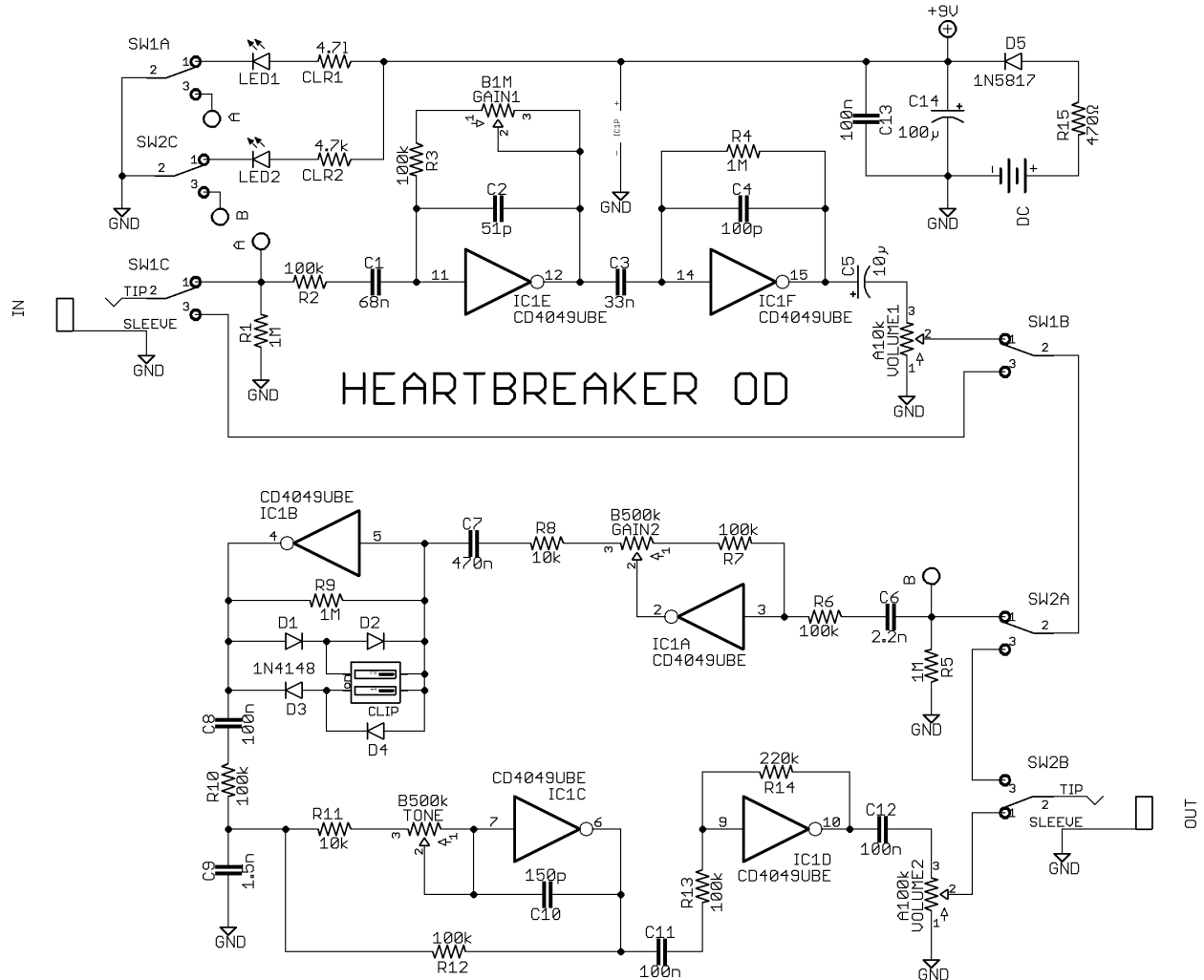


Heartbreaker Overdrive

DESCRIPTION

The HEARTBREAKER OVERDRIVE came about from wondering what to do with the extra hex inverters in a CD4049 in a Way Huge® Red Llama™. Then I remembered that half the Way Huge® Camel Toe™ is a Red Llama™, so I figured I'd use the other 4 inverters to emulate a Tube Screamer. Run Off Groove has a CD4049-based Tube Screamer project, which I used as a starting point to create the HEARTBREAKER—a half Llama, half Screamer(ish) dual overdrive. The name comes from Mike Campbell often using a Camel Toe™ and being a Tom Petty and the Heartbreakers fan, it seems like a good fit. The HEARTBREAKER is designed to fit in a 125B enclosure with the footswitches and pots board mounted, but if you've got ~~elown~~ ~~feet~~ want more space, it will fit in a 1590BB as well.

SCHEMATIC



BILL OF MATERIALS

Resistors

R1	1M
R2	100k
R3	100k
R4	1M
R5	1M
R6	100k
R7	100k
R8	10k
R9	1M
R10	100k
R11	10k
R12	100k
R13	100k
R14	220k
R15	470Ω
CLR1	4.7k
CLR2	4.7k

Capacitors

C1	68n
C2	51p
C3	33n
C4	100p
C5	10μ
C6	2.2n
C7	470n
C8	100n
C9	1.5n
C10	150p

C11	100n
C12	100n
C13	100n
C14	100μ

Semiconductors

D1	1N4148
D2	1N4148
D3	1N4148
D4	1N4148
D5	1N5817
IC1	CD4049UBE
LED1	LED5MM
LED2	LED5MM

Electromechanical

CLIP	2 position DIP switch
GAIN1	B1M
VOLUME1	A10k
GAIN2	B500k
TONE	B500k
VOLUME2	A100k
SW1	3PDT
SW2	3PDT

Note:

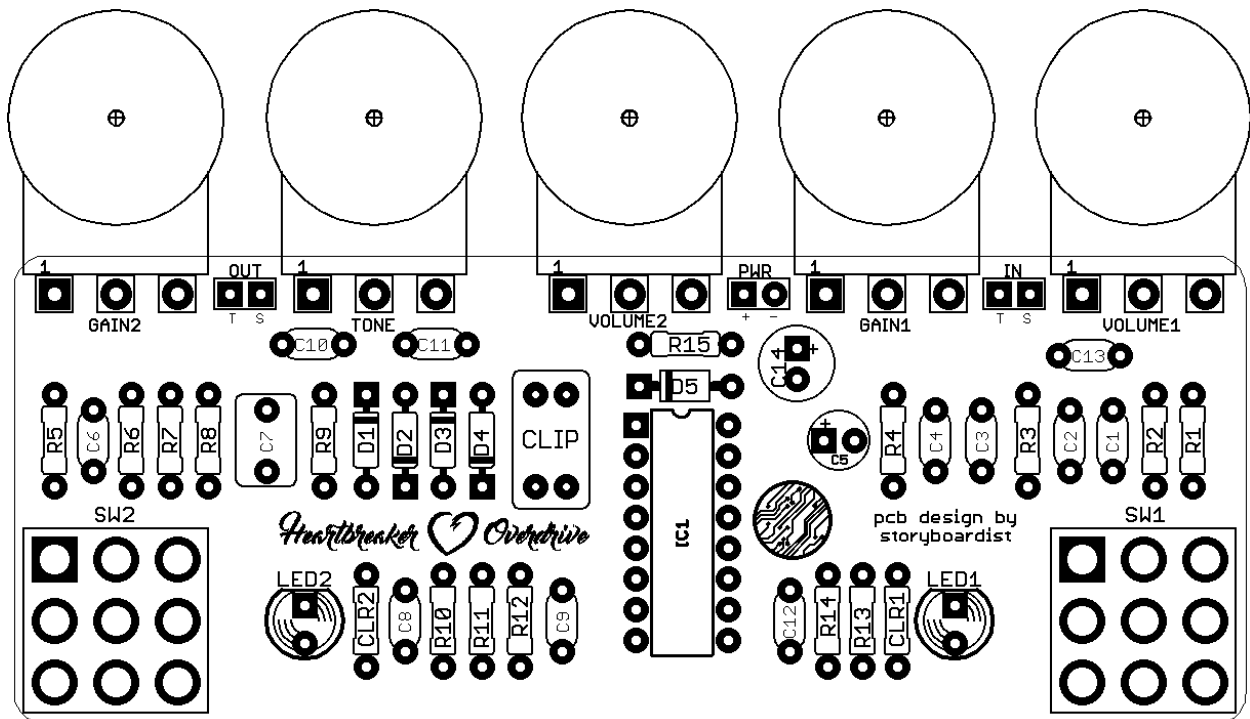
The CLIP DIP switch allows you to choose between 2 symmetrical diodes, 3 asymmetrical diodes, and 4 symmetrical diodes.

SHOPPING LIST

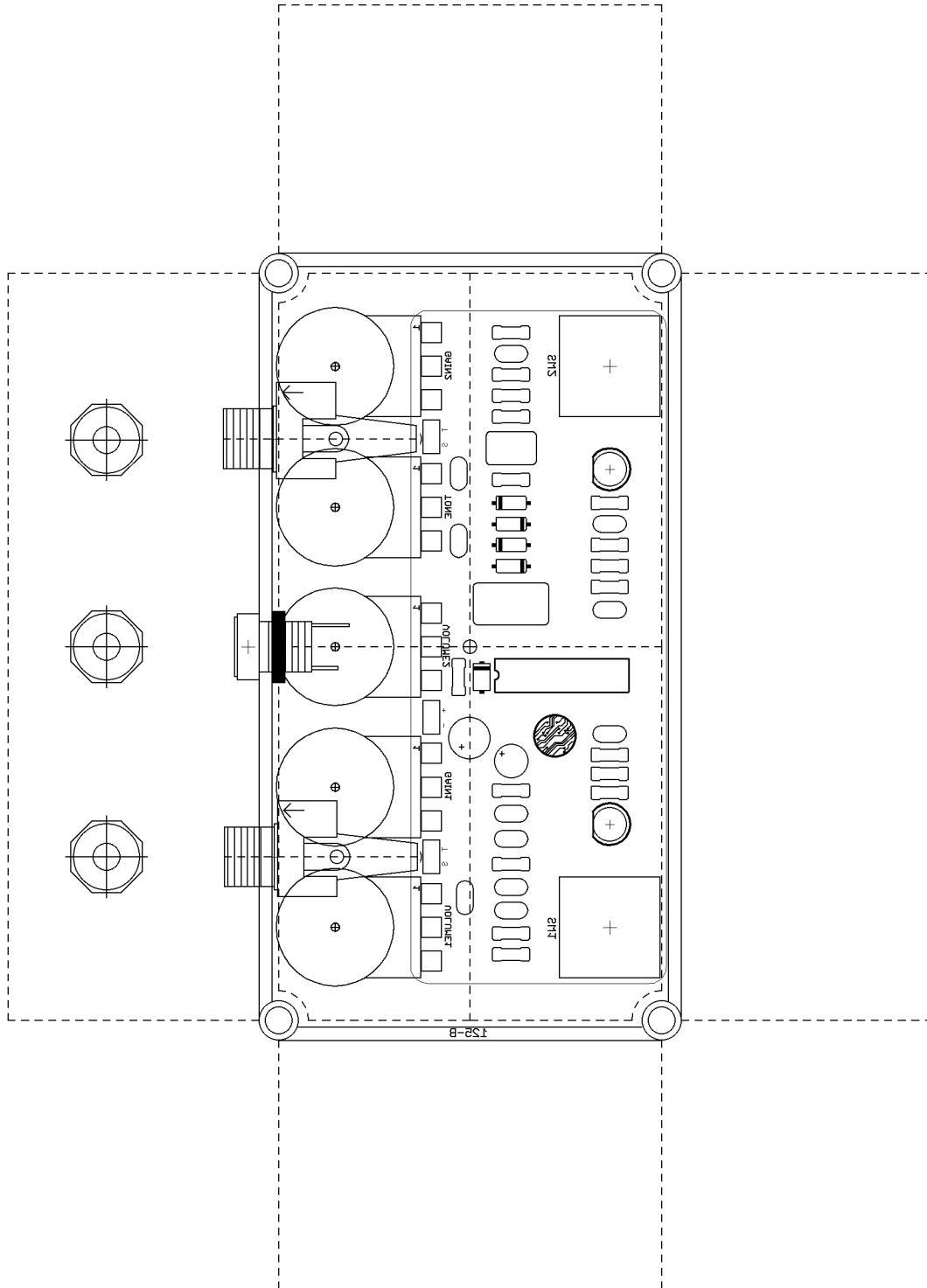
Value	Type (suggested)	Quantity
470Ω	¼ watt metal or carbon film	1
4.7k	¼ watt metal or carbon film	2
10k	¼ watt metal or carbon film	2
100k	¼ watt metal or carbon film	7
220k	¼ watt metal or carbon film	1
1M	¼ watt metal or carbon film	4
51p	Ceramic (63v or higher)	1
100p	Ceramic (63v or higher)	1
150p	Ceramic (63v or higher)	1

1.5n	Film (63v or higher)	1
2.2n	Film (63v or higher)	1
33n	Film (63v or higher)	1
68n	Film (63v or higher)	1
100n	Film (63v or higher)	4
470n	Film (63v or higher)	1
10μ	Electrolytic (35v or higher)	1
100μ	Electrolytic (35v or higher)	1
1N4148		4
1N5817		1
CD4049UBE		1
5mm LED		2
2 position DIP switch		1
A10k (audio/log)	16mm right angle PC mount long pin	1
A100k (audio/log)	16mm right angle PC mount long pin	1
B500k (linear)	16mm right angle PC mount long pin	2
B1M (linear)	16mm right angle PC mount long pin	1
3PDT	Footswitch	2

LAYOUT



DRILL TEMPLATE



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Not for non-peer to peer resale.