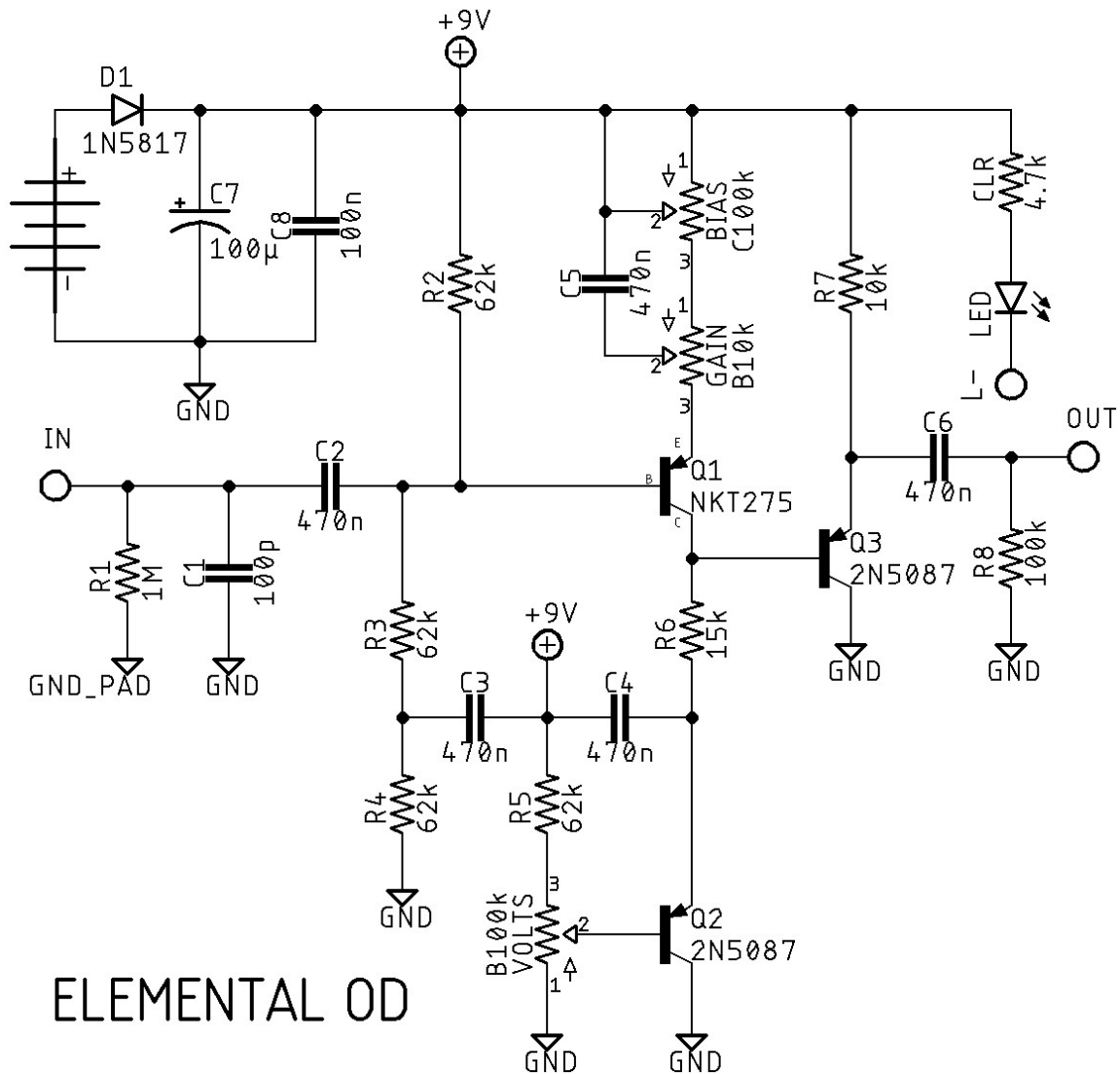


ELEMENTAL OD

DESCRIPTION

The ELEMENTAL OD (and the EHX Germanium OD it's based on) is not your typical overdrive. This unique circuit uses 2, high gain PNP silicon transistors and single PNP germanium transistor. Even though the transistors are PNP, it still uses a regular center negative power supply. The 3 controls are very interactive with each other, as all 3 pots control the bias of circuit in some way or another. Just about any PNP germanium can be used as long as it's low leakage. I used a Russian MP16 in my build and it fired right up.

SCHEMATIC



BOM

Resistors

R1	1M
R2	62k
R3	62k
R4	62k
R5	62k
R6	15k
R7	10k
R8	100k
CLR	4.7k

Capacitors

C1	100p
C2	470n
C3	470n
C4	470n
C5	470n
C6	470n

C7	100μ
C8	100n

Semiconductors

D1	1N5817
LED	3 or 5mm LED
Q1	NKT275
Q2	2N5087
Q3	2N5087

Electromechanical

Bias	C100k
Gain	B10k
Volts	B100k

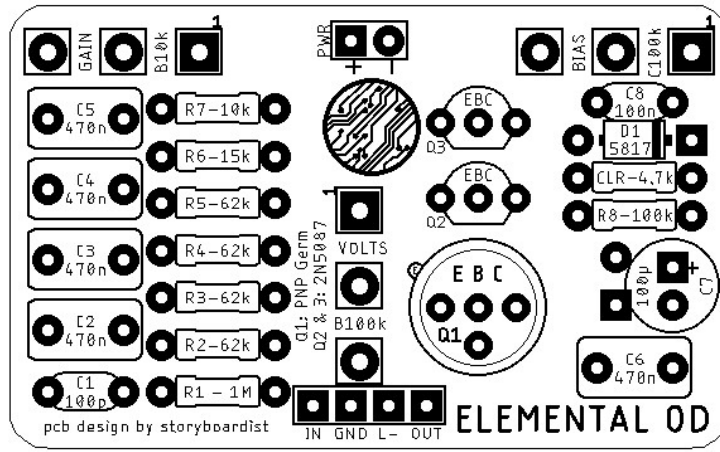
Notes

Other PNP germanium transistors can be used. MP16 works well. Also 2N3906s will work in place of 2N5087s.

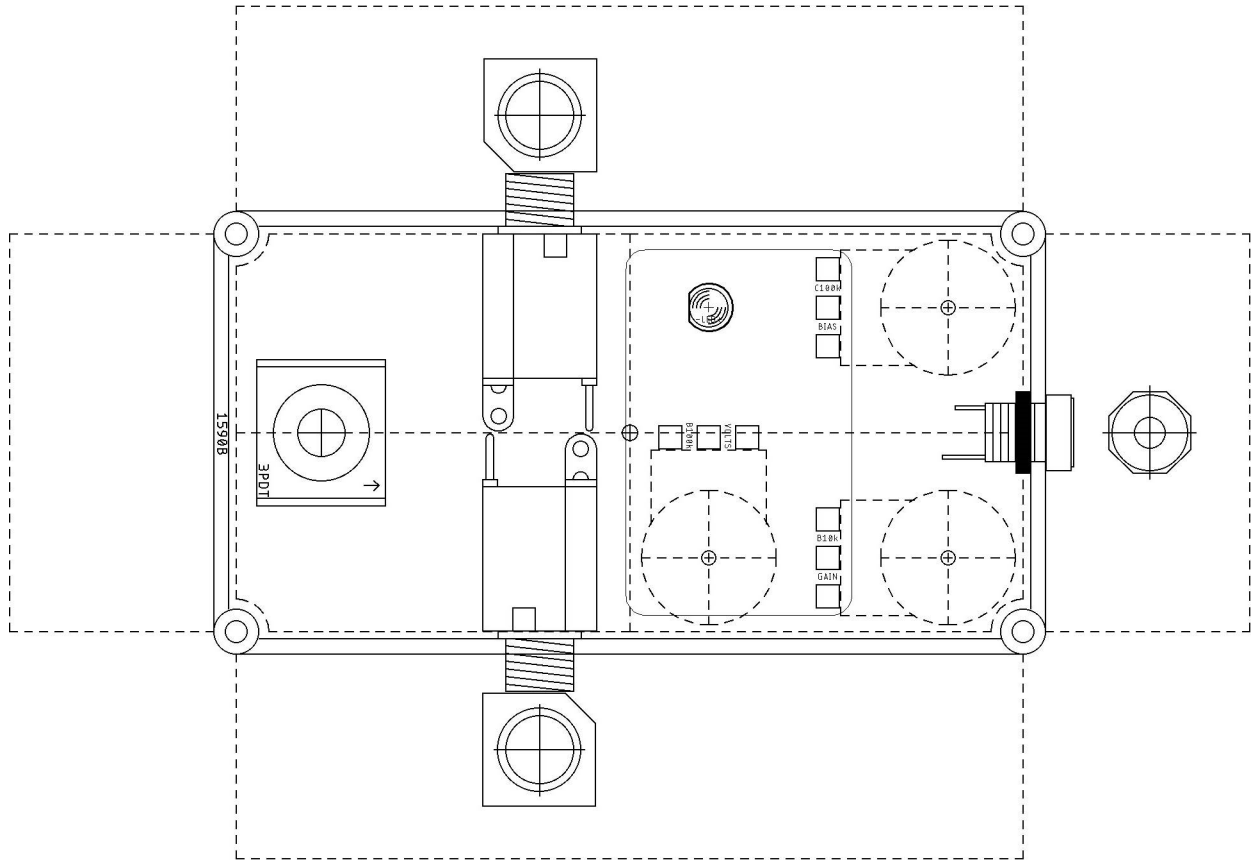
SHOPPING LIST

Value	Type (suggested)	Quantity
4.7k	¼ watt metal or carbon film	1
10k	¼ watt metal or carbon film	1
15k	¼ watt metal or carbon film	1
62k	¼ watt metal or carbon film	4
100k	¼ watt metal or carbon film	1
1M	¼ watt metal or carbon film	1
100p	Ceramic	1
100n	Ceramic or film	1
470n	Film	5
100μ	Electrolytic	1
1N5817	Schottky rectifier diode	1
LED	3 or 5mm LED	1
2N5087	PNP silicon BJT	2
NKT275	PNP germanium BJT	1
B10k	16mm right angle PC mount	1
B100k	16mm right angle PC mount	1
C100k	16mm right angle PC mount	1

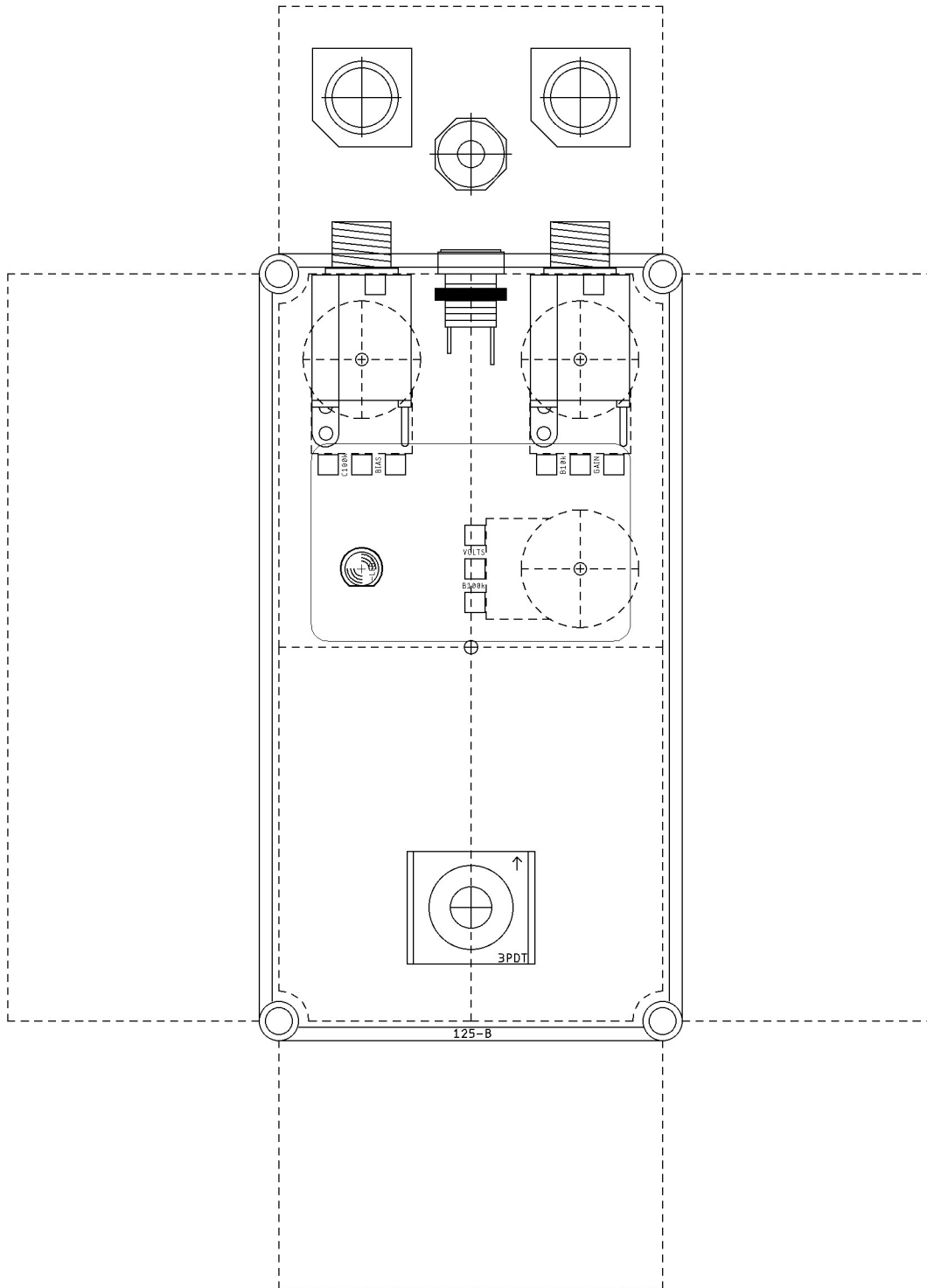
LAYOUT



DRILL TEMPLATE (1590B)



DRILL TEMPLATE (125B)



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