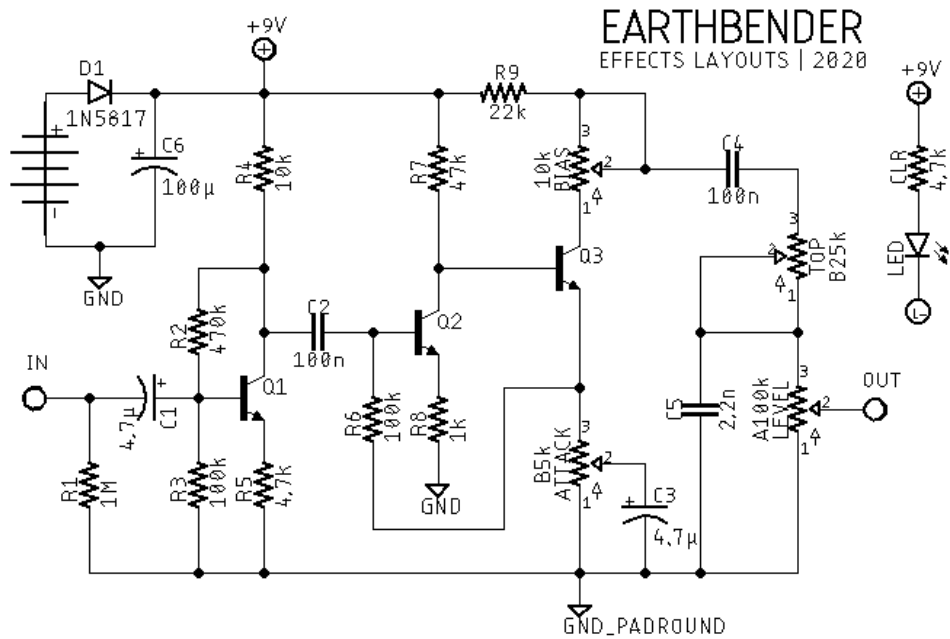


EARTHBENDER

DESCRIPTION

The EARTHBENDER is a silicon variant on the classic Sola Sound Tone Bender Mk. II and based on the Earthquaker Devices Black Ash. Low hFE transistors work best, like 2N2369, 2N2222A, 2N3903, etc. (2N3903 was in the original Black Ash.) The additional tone control is simple but effective in this great sounding fuzz circuit. The LED can be board mounted, but may be better suited to be wired off board. As for the bias trimmer, tune it till the collector of Q3 gets about half the supply voltage, then adjust it till it sound right.

SCHEMATIC



BOM

Resistors

R1	1M
R2	470k
R3	100k
R4	10k
R5	4.7k
R6	100k
R7	47k
R8	1k

R9	22k
CLR	4.7k

Capacitors

C1	4.7µ
C2	100n
C3	4.7µ
C4	100n
C5	2.2n

C6	100μ
----	------

LED	3-5mm
-----	-------

Semiconductors

D1	1N5817
Q1	Low gain NPN silicon
Q2	Low gain NPN silicon
Q3	Low gain NPN silicon

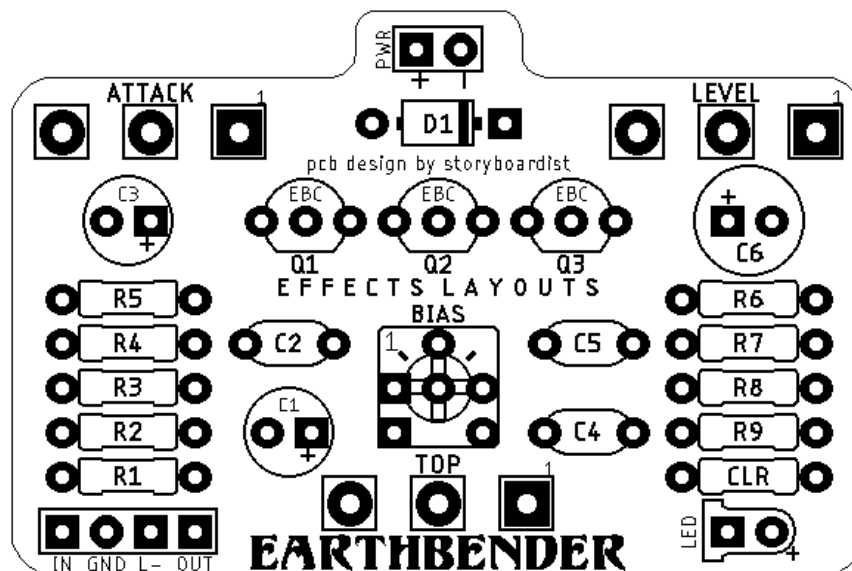
Electromechanical

Attack	B5k
Top	B25k
Level	A100k

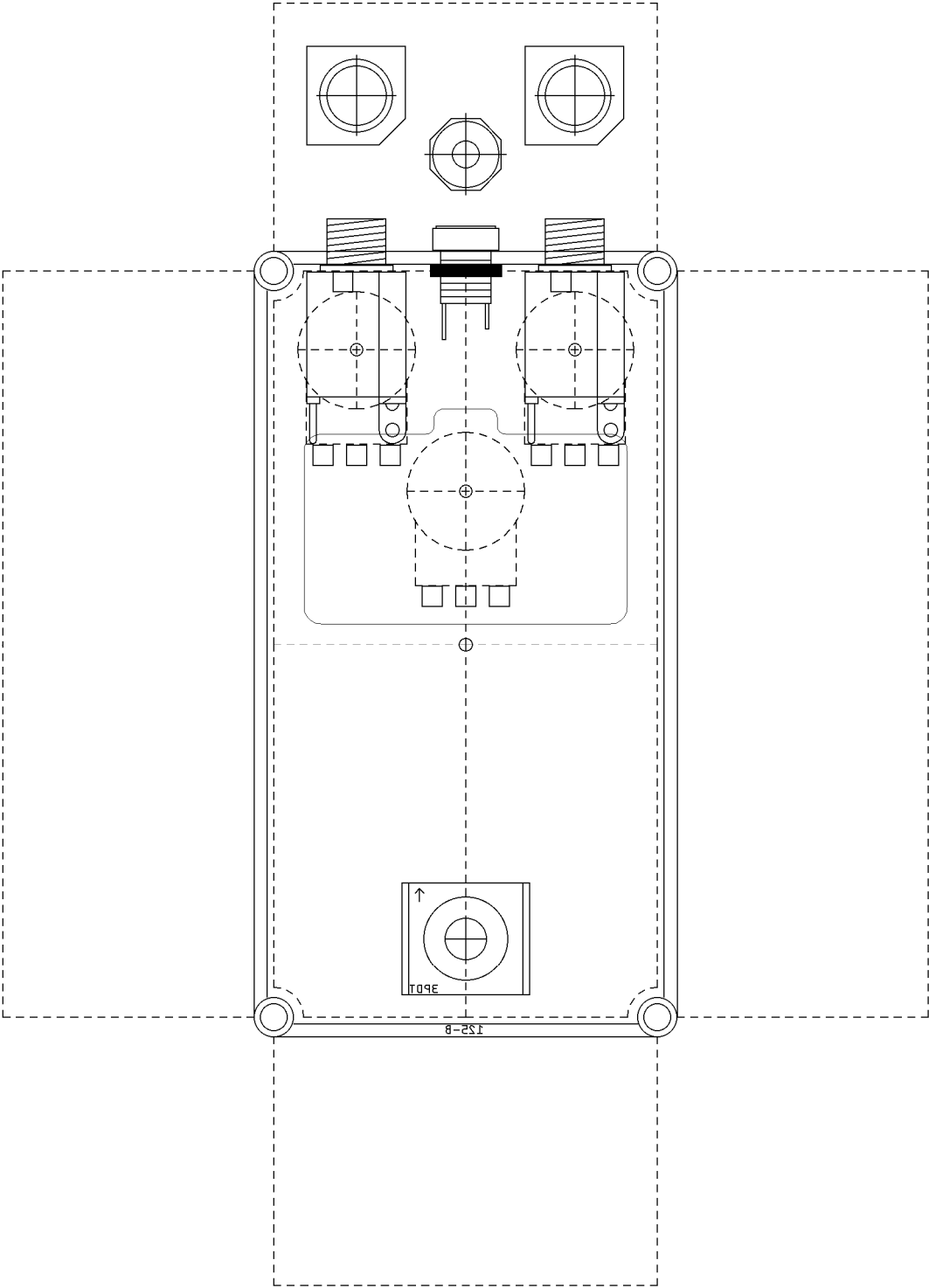
SHOPPING LIST

Value	Type (suggested)	Quantity
1k	¼ watt metal or carbon film	1
4.7k	¼ watt metal or carbon film	2
10k	¼ watt metal or carbon film	1
22k	¼ watt metal or carbon film	1
47k	¼ watt metal or carbon film	1
100k	¼ watt metal or carbon film	2
470k	¼ watt metal or carbon film	1
1M	¼ watt metal or carbon film	1
2.2n	Film	1
100n	Film	2
4.7μ	Electrolytic	2
100μ	Electrolytic	1
1N5817	Schotky rectifier diode	1
NPN Silicon	BJT	3
LED	3-5mm	1
A100k	16mm right angle PC mount	1
B5k	16mm right angle PC mount	1
B25k	16mm right angle PC mount	1

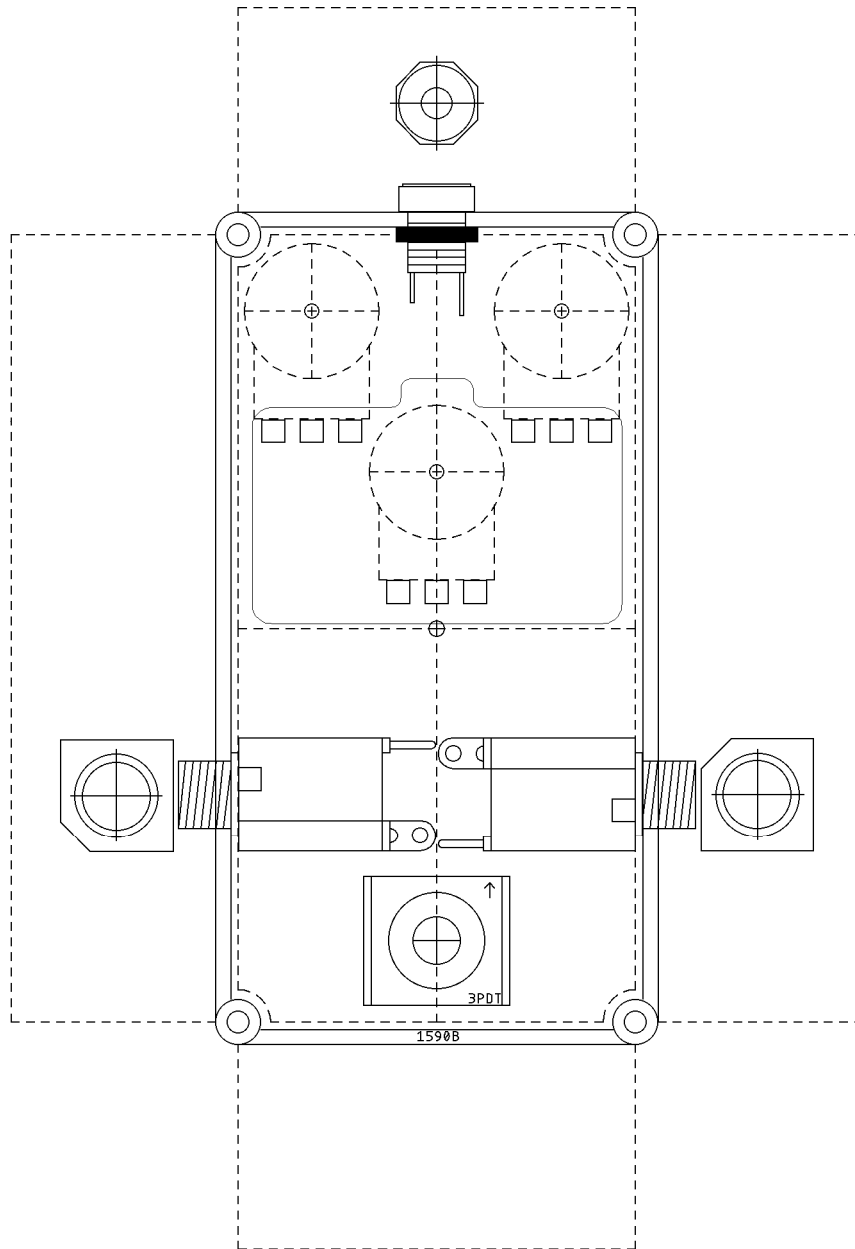
LAYOUT



DRILL TEMPLATE (125B)



DRILL TEMPLATE (1590B)



EFFECTS LAYOUTS © 2020
For DIY and small commercial applications.
Not for non-peer to peer resale.