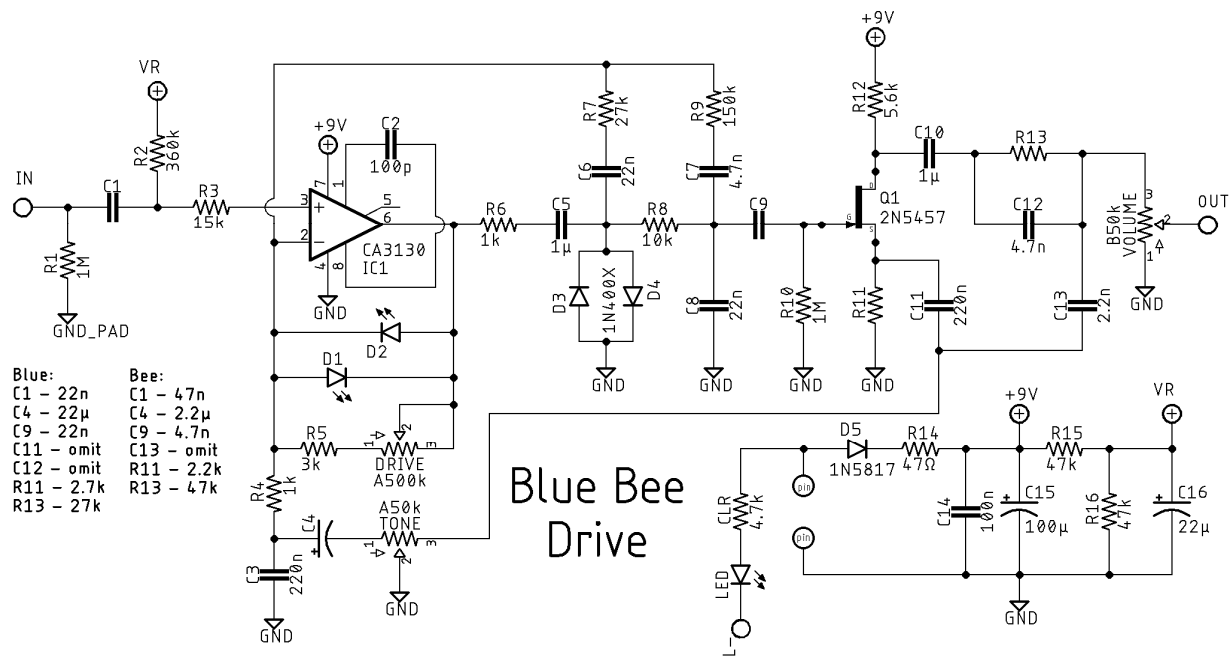


blue bee drive

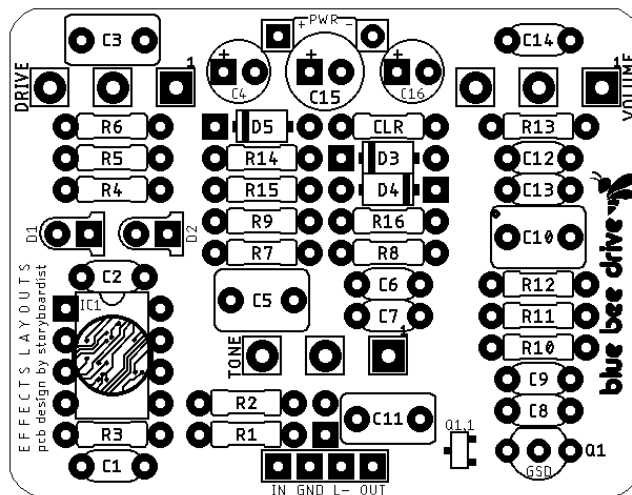
DESCRIPTION

The BLUE BEE DRIVE allows you to build either a bass or guitar overdrive based on the Blueberry Bass and Honey Bee overdrives from Bearfoot Fx. The two circuits share a lot of the same topography, with a few minor changes. Both circuits offer light to medium drive, combining both preamp and dirt properties for warm overdriven tones.

SCHEMATIC



LAYOUT



BOM

Resistors

R1	1M
R2	360k
R3	15k
R4	1k
R5	3k
R6	1k
R7	27k
R8	10k
R9	150k
R10	1M
R11	See notes
R12	5.6k
R13	See notes
R14	47 Ω
R15	47k
R16	47k
CLR	4.7k

Capacitors

C1	See notes
C2	100p
C3	220n
C4	See notes
C5	1 μ
C6	22n
C7	4.7n
C8	22n
C9	See notes
C10	1 μ
C11	220n
C12	4.7n
C13	2.2n
C14	100n
C15	100 μ
C16	22 μ

Semiconductors

D1	3mm LED (see notes)
D2	3mm LED (see notes)
D3	1N400X (see notes)

D4	1N400X
D5	1N5817
IC1	CA3130EZ
LED	3 or 5mm LED
Q1	2N5457
Q1.1	MMBF5457

Electromechanical

Drive	A500k
Tone	A50k
Volume	B50k

Notes

To build the Blue (bass):

R11	2.7k
R13	27k
C1	22n
C4	22 μ
C9	22n
C11	Omit
C12	Omit
D1	3mm diffused red LED
D2	3mm diffused red LED

To build the Bee (guitar):

R11	2.2k
R13	47k
C1	47n
C4	2.2 μ
C9	4.7n
C13	Omit
D1	3mm diffused green LED
D2	3mm diffused green LED

D3-4 can be 1N4001, 1N4004, 1N4007, etc., or even 1N4148. 1N4007 is what is used in the originals.

SHOPPING LIST

Value	Type (suggested)	Quantity
47Ω	¼ watt metal or carbon film	1
1k	¼ watt metal or carbon film	2
3k	¼ watt metal or carbon film	1
4.7k	¼ watt metal or carbon film	1
5.6k	¼ watt metal or carbon film	1
10k	¼ watt metal or carbon film	1
15k	¼ watt metal or carbon film	1
27k	¼ watt metal or carbon film	1
47k	¼ watt metal or carbon film	2
150k	¼ watt metal or carbon film	1
360k	¼ watt metal or carbon film	1
100p	Ceramic	1
2.2n	Film	1
4.7n	Film	2
22n	Film	2
100n	Film or ceramic	1
220n	Film	2
1μ	Film	2
22μ	Electrolytic (35v or higher)	1
100μ	Electrolytic (35v or higher)	1
1N400X	Silicon rectifier diode	2
1N5817	Schottky rectifier diode	1
CA3130EZ	Single opamp	1
LED	3 or 5mm LED	1
2N5457 or MMBF5457	JFET	1
A50k	16mm right angle PC mount	1
B50k	16mm right angle PC mount	1
A500k	16mm right angle PC mount	1

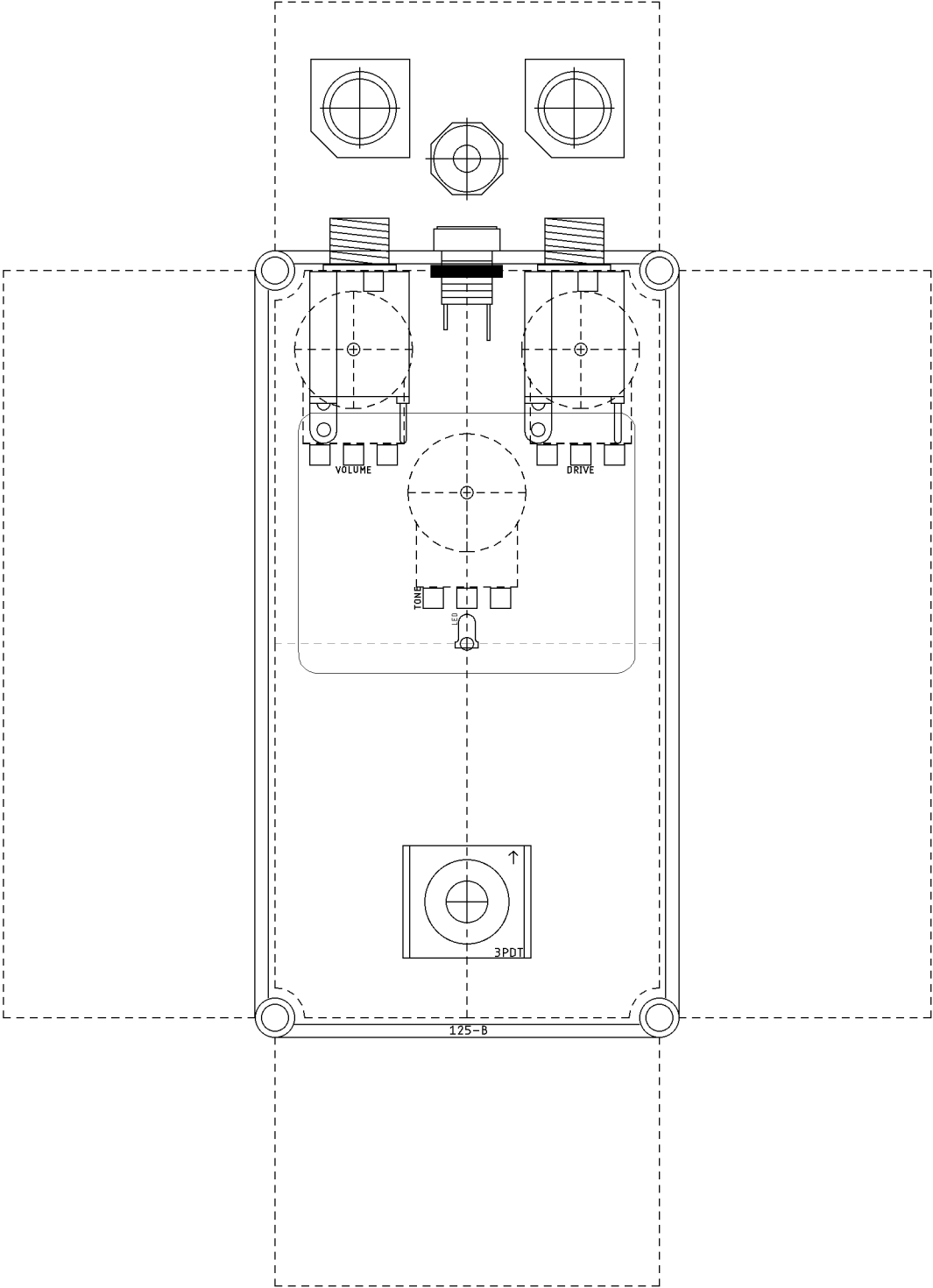
Blue

2.7k	¼ watt metal or carbon film	1
27k	¼ watt metal or carbon film	1
22n	Film	2
22μ	Electrolytic (35v or higher)	1
3mm diffused red LED	LED	2

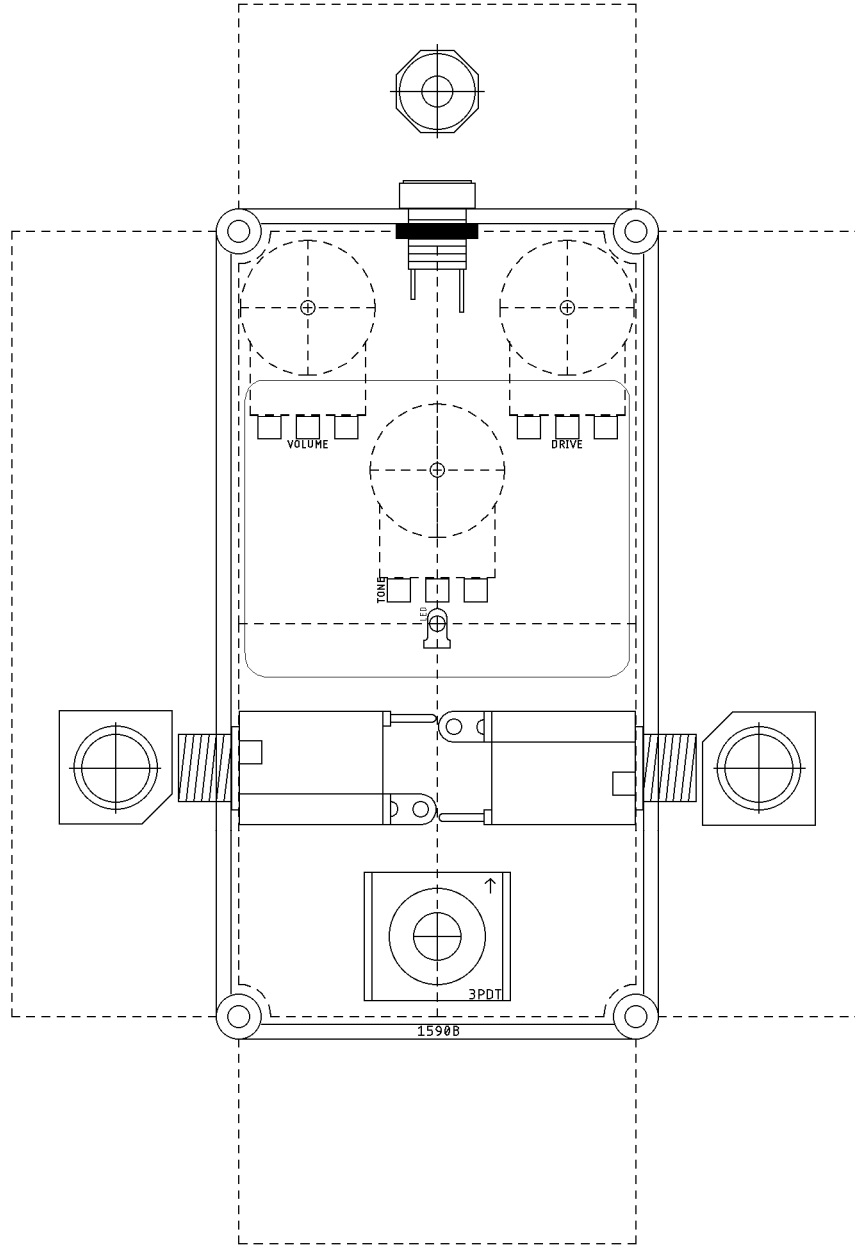
Bee

2.2k	¼ watt metal or carbon film	1
47k	¼ watt metal or carbon film	1
4.7n	Film	1
47n	Film	1
2.2μ	Electrolytic (35v or higher)	1
3mm diffused green LED	LED	2

DRILL TEMPLATE (125B)



DRILL TEMPLATE (1590B)



EFFECTS LAYOUTS © 2019
For DIY and small commercial applications.
Not for non-peer to peer resale.