



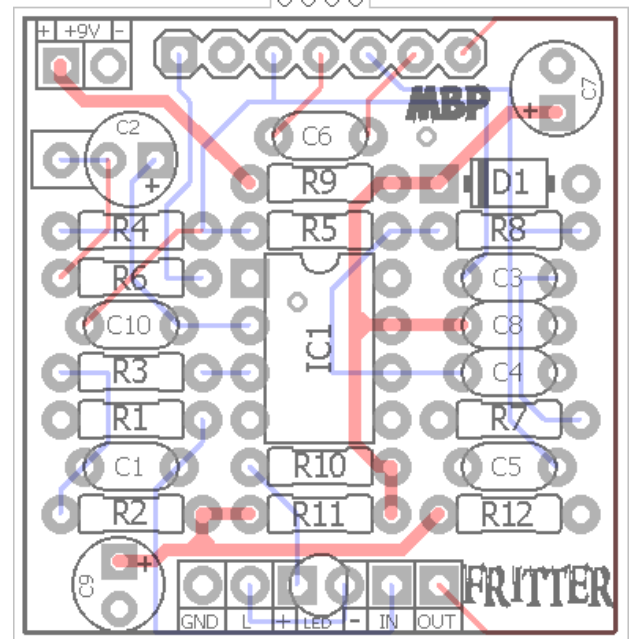
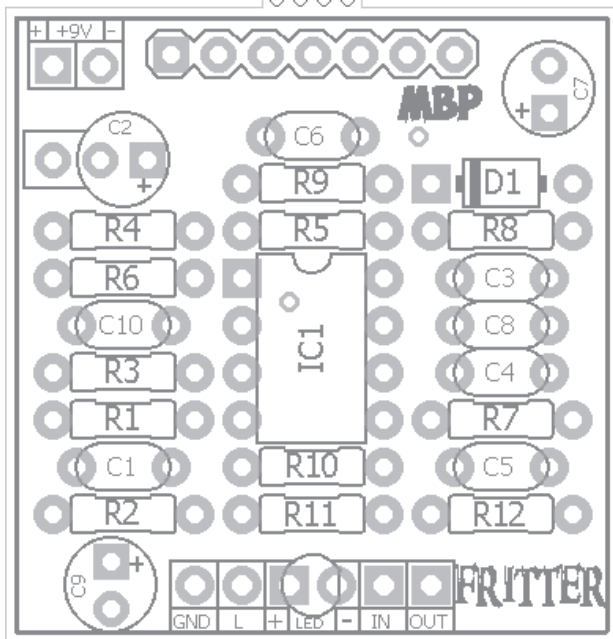
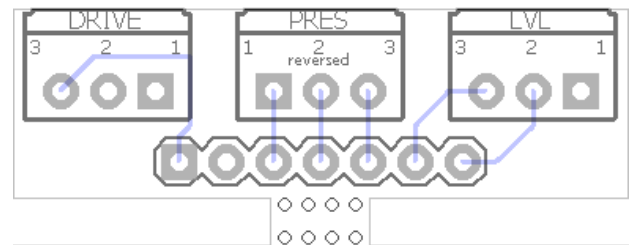
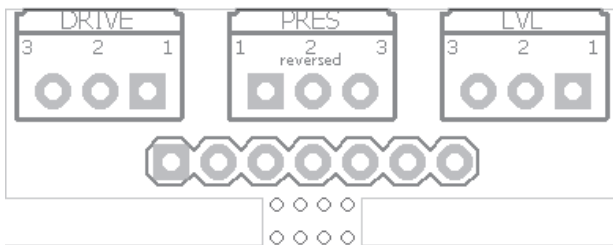
FRITTER

FX TYPE: Overdrive

Based on the Crowther Audio® Hotcake™

The **Fritter** is based on the 2000's era version of the Hotcake™ and is designed to fit in a 1590A enclosure. This is a pretty gnarly sounding overdrive, which is probably due to the lack of any sort of clipping diode. But, I wouldn't characterize it as harsh sounding, either. Rather, it strikes a good balance between being a hairy low to medium gainer without sounding like everything else out there.

I have included suggested mods for an "mbp" version which I arrived at by tweaking the circuit on a breadboard. The mbp version has less gain but is nowhere near as bassy, has a smoothing cap (220pF) in the feedback loop of the IC and a smaller value cap in the Presence control. I prefer this version but let your own ear be your guide. Luckily it only takes about 10 minutes to breadboard the circuit if you want to evaluate the changes yourself before committing to them.



The extra hole next to C2 is for the "mbp" mod. This replaces the stock 10uF with a 100n film cap.

Break the main and daughter PCBs apart using gentle pressure. You can use a wire cutter to trim up the mouse bites.

B.O.M.

This BOM and Shopping List is for the Stock version. Refer to the schematic on the last page for the values used in the "mbp" version. Note: C10 is omitted in the stock version.

Resistors		Caps		Diodes	
R1	1M	C1	10n	D1	8.2v Zener
R2	1M	C2	10uF	IC	
R3	10k	C3	82n	IC1	TL071
R4	100k	C4	470pF	Pots	
R5	10k	C5	22n	DRIVE	50kC
R6	220R	C6	56n	LVL	50kA
R7	1k	C7	47uF	PRES	25kB
R8	10k	C8	100n		
R9	220R	C9	10uF		
R10	4k7				
R11	82k				
R12	100k				

Value	QTY	Type	Rating
220R	2	Metal / Carbon Film	1/4W
1k	1	Metal / Carbon Film	1/4W
4k7	1	Metal / Carbon Film	1/4W
10k	3	Metal / Carbon Film	1/4W
82k	1	Metal / Carbon Film	1/4W
100k	2	Metal / Carbon Film	1/4W
1M	2	Metal / Carbon Film	1/4W
470pF	1	Ceramic / MLCC	16v min.
10n	1	Film	16v min.
22n	1	Film	16v min.
56n	1	Film	16v min.
82n	1	Film	16v min.
100n	1	Film	16v min.
10uF	2	Electrolytic	16v min.
47uF	1	Electrolytic	16v min.
Zener	1	8.2v	
TL071	1		
50kC	1	9mm PC Mount	
50kA	1	9mm PC Mount	
25kB	1	9mm PC Mount	

Low-Profile Electrolytic:

<http://smallbear-electronics.mybigcommerce.com/electrolytic-radial-low-profile-16v-1-f-100-f/>

8.2v Zener:

<http://smallbear-electronics.mybigcommerce.com/diode-zener-1n4738a/>

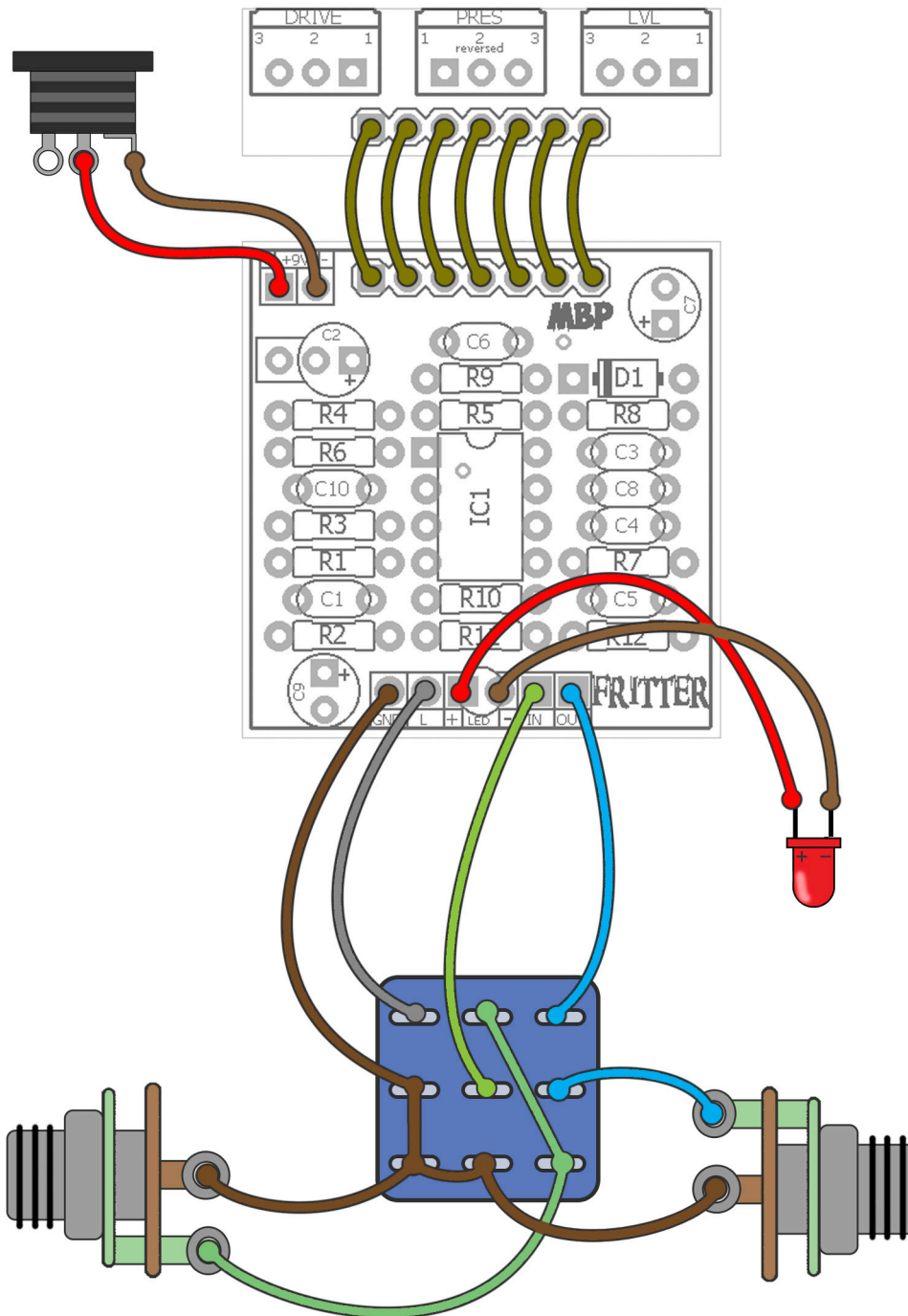
TL071:

<http://smallbear-electronics.mybigcommerce.com/ic-tl071cp/>

9mm PC Mount Pots:

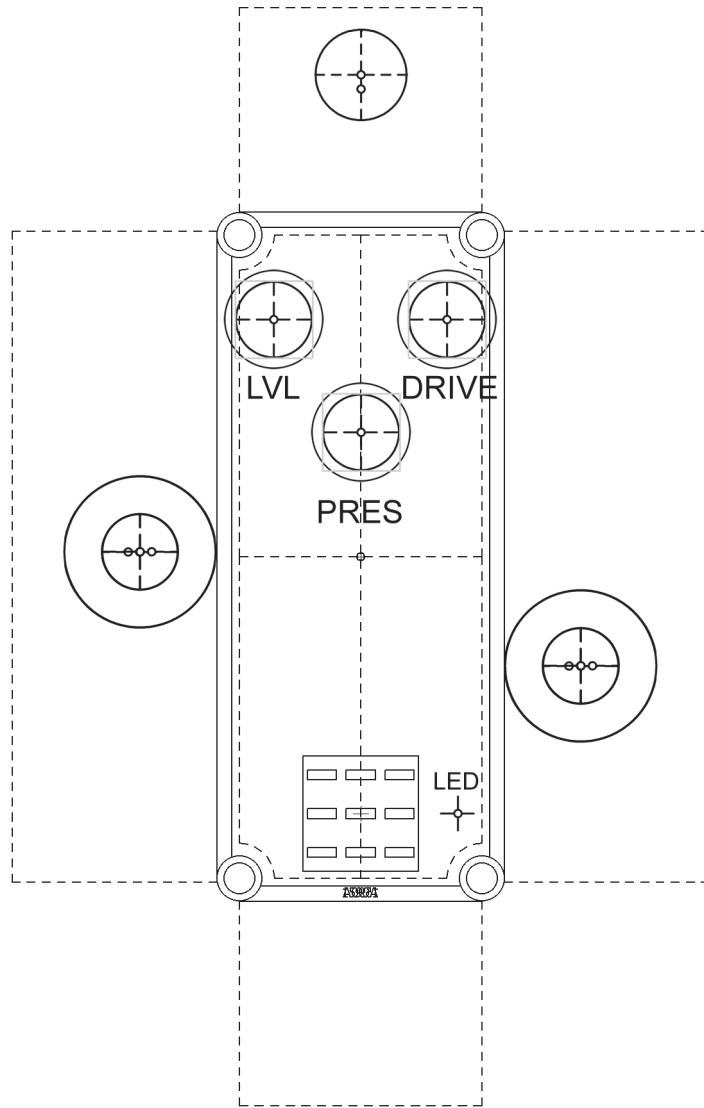
<http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-9mm-pc-mount/>

Wiring



The Drive and LVL pots are soldered to the top of the daughter board. The Pres pot must be soldered to the bottom to create the classic “triangle” control layout. Make sure you have the pots right before soldering them!

1590A Drill Guide



Schematic

