

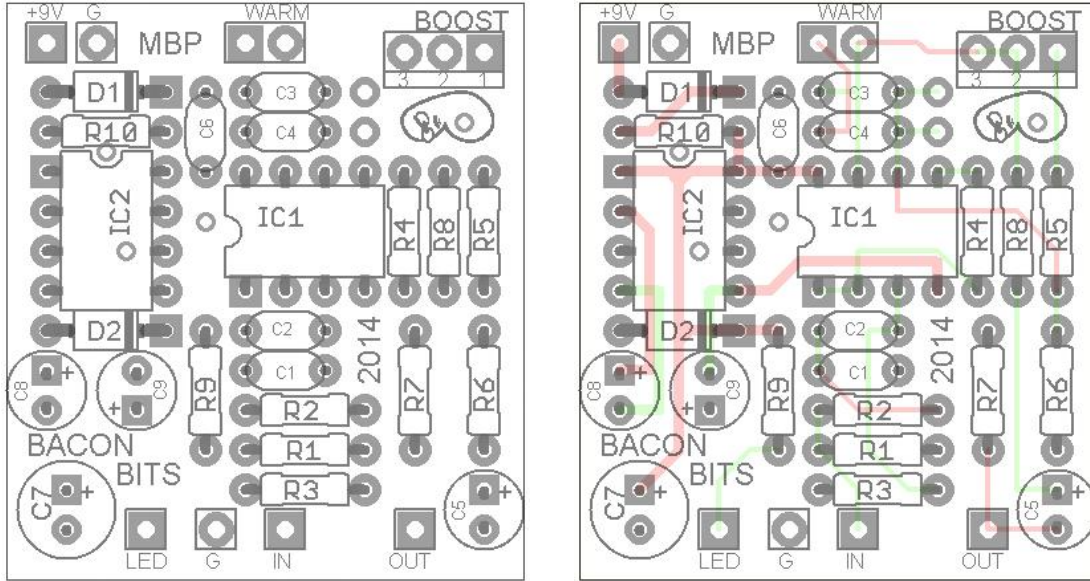
BACON BITS

2014 edition

FX TYPE: Boost

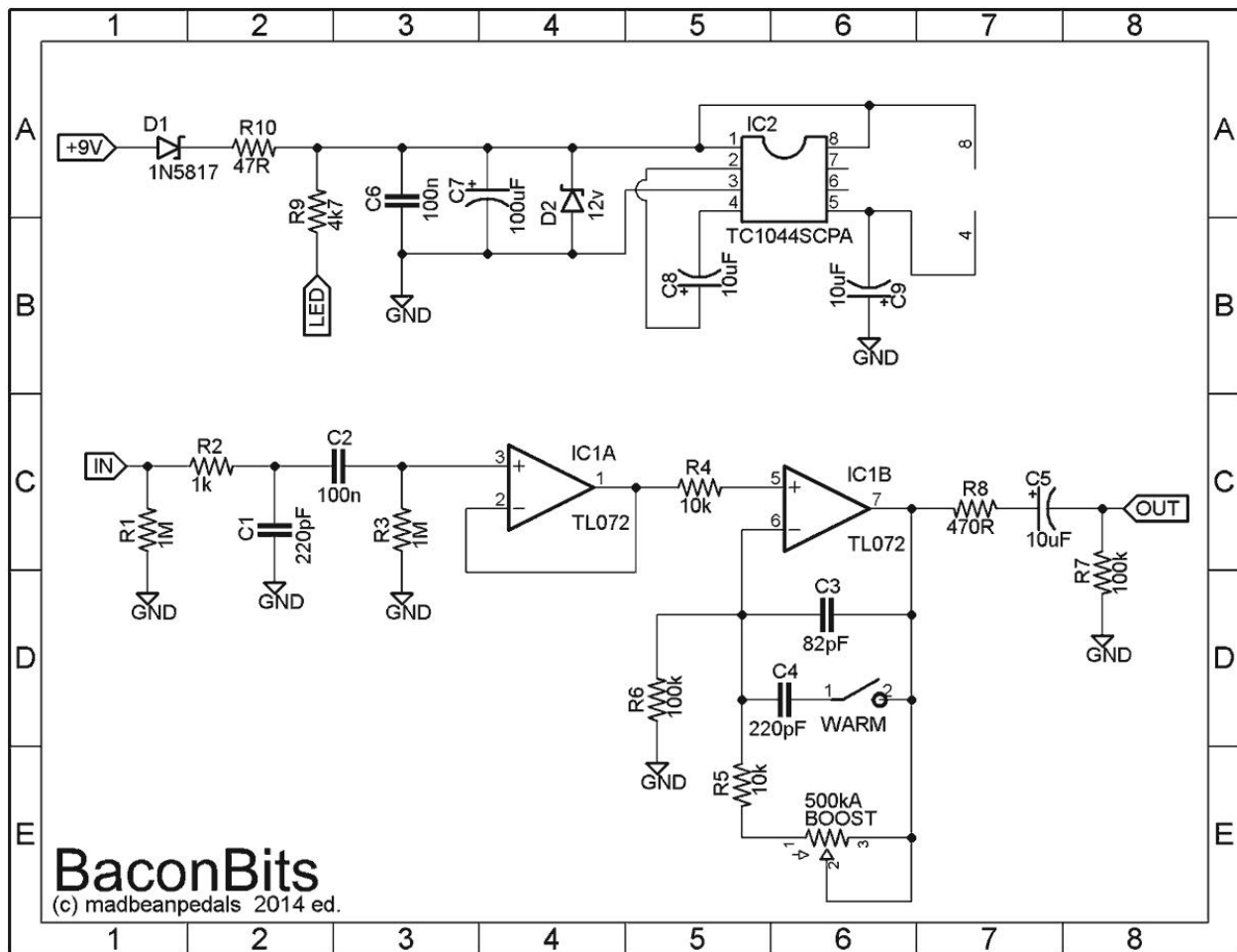
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1.3" W x 1.45" H



Resistors		Caps		Diodes	
R1	1M	C1	220pF	D1	1N5817
R2	1k	C2	100n	D2	12v Zener
R3	1M	C3	82pF	IC's	
R4	10k	C4	220pF	IC1	TL072
R5	10k	C5	10uF	IC2	TC1044SCPA
R6	100k	C6	100n	Switch	
R7	100k	C7	100uF	WARM	SPST/DT
R8	470R	C8	10uF	Pot	
R9	4k7	C9	10uF	BOOST	500kA
R10	47R				

Value	QTY	Type	Rating
47R	1	1/4W Metal/Film	
470R	1	1/4W Metal/Film	
1k	1	1/4W Metal/Film	
4k7	1	1/4W Metal/Film	
10k	2	1/4W Metal/Film	
100k	2	1/4W Metal/Film	
1M	2	1/4W Metal/Film	
82pF	1	Ceramic	
220pF	2	Ceramic	
100n	2	Film/MLCC	16v or more
10uF	3	Electrolytic	16v or more
100uF	1	Electrolytic	16v or more
1N5817	1		
12v Zener	1		
TL072	1		
TC1044SCPA	1	or, ICL7660SPCA, MAX1044CPA	
SPST/DT	1		
500kA	1	9mm/16mm	



The **BaconBits** was designed to be a booster companion to low wattage tube amps. These amps often have lower headroom than their high-wattage counterparts and the BaconBits will push the input of such an amp into saturation with the click of a switch. It utilizes an input buffer which feeds into a negative feedback gain stage powered by a split rail supply. The result adds a lot of “shine” to the guitar at lower boost settings and dynamic, sparkling overdrive at high boost settings. The 2014 edition adds a “Warm” switch to shelve some of the high end of the circuit for brighter guitar/amp combinations.

There are several IC’s that will work in the BaconBits. These tend to produce the best results with the most character.

TL072 – Very good all-around

TLC272CP - Better than the TL072, but also slightly compressed (my personal favorite).

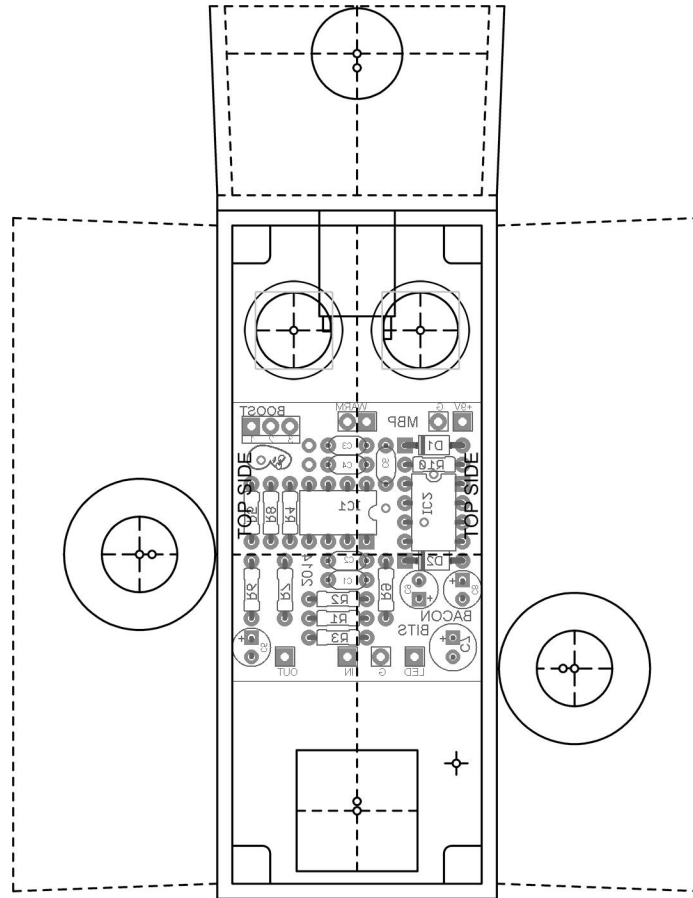
OPA2604 - A little less gain than the 272CP with very good dynamics.

TLC2262 – About the same as the OPA2604 and cheaper.

The TC1044**SCPA** is suggested for IC2. The MAX1044**CPA** and ICL7660**SCPA** will also work. If using the ICL7660SCPA, use a 9.1v Zener for D2 as the max voltage that chip can tolerate is only 10v. The TC1044 and MAX1044 should use a 12v Zener instead. In either case, you should use a 9v power supply to run the Bacon Bits.

MODS: You can reduce the value of R6 to 68k or 47k for more gain, if desired.

3.58" W x 4.66" H
1590A Enclosure



Download the Photoshop template for this guide here:
http://www.madbeanpedals.com/projects/BaconBits/BaconBits_Drill.zip

Download the PREVIOUS version of the Bacon Bits documentation (2012/2013 ed.):
<http://www.madbeanpedals.com/projects/BaconBits/BaconBits.zip>

Please read the Baby Build Guide for tips on how to build 1590A projects with ease:
<http://www.madbeanpedals.com/downloads/BabyBoardGuide.pdf>

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