

TITAN BOOST / OCTAVE

A printed circuit layout for John Hollis' "Titan Boost" and the accompanying octave modification. I have taken the liberty of adding D1-D4 "catch diodes" in case the transformer primary ever feels like sending an inductive spike back into the opamp. It might save the outputs.

I spent about half an hour trying to figure out some super simple stomp switch to convert from boost to octave without losing a major amount of signal, and finally gave up. I thought of

- switching to a FWCT arrangement with the centertapped transformer (loses 1/2 the signal level)
- using a DPDT to switch the Ge diodes in and out (need more poles than that)
- using a second transformer in parallel (they're only \$2, but still, that's clumsy)

Finally I decided to just lay out the circuit so it could be made either way. If you have to buy a second transformer, you might as well make a second board and have more flexibility.

If you are making the booster, leave off D5, D6, D7, and D8 and put wire jumpers in where D5 and D8 would otherwise go.

Following John's original schematic, the parts are:

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| C1 = 0.001uF (1nF) | U1 = TL072 or other dual opamp | D1,2,3,4 = 1N914 or 1N4148 |
| C2, C3 = 10uF Electro | TR1 = 42TM006 20K to 1K (Mouser) | D5,6,7,8 = Ge diode, 1N34, 1N100, 1N270 |
| R1, R2 = 10M 1/4W | | |
| R3,5,6,7,8 = 10K 1/4W | | |

