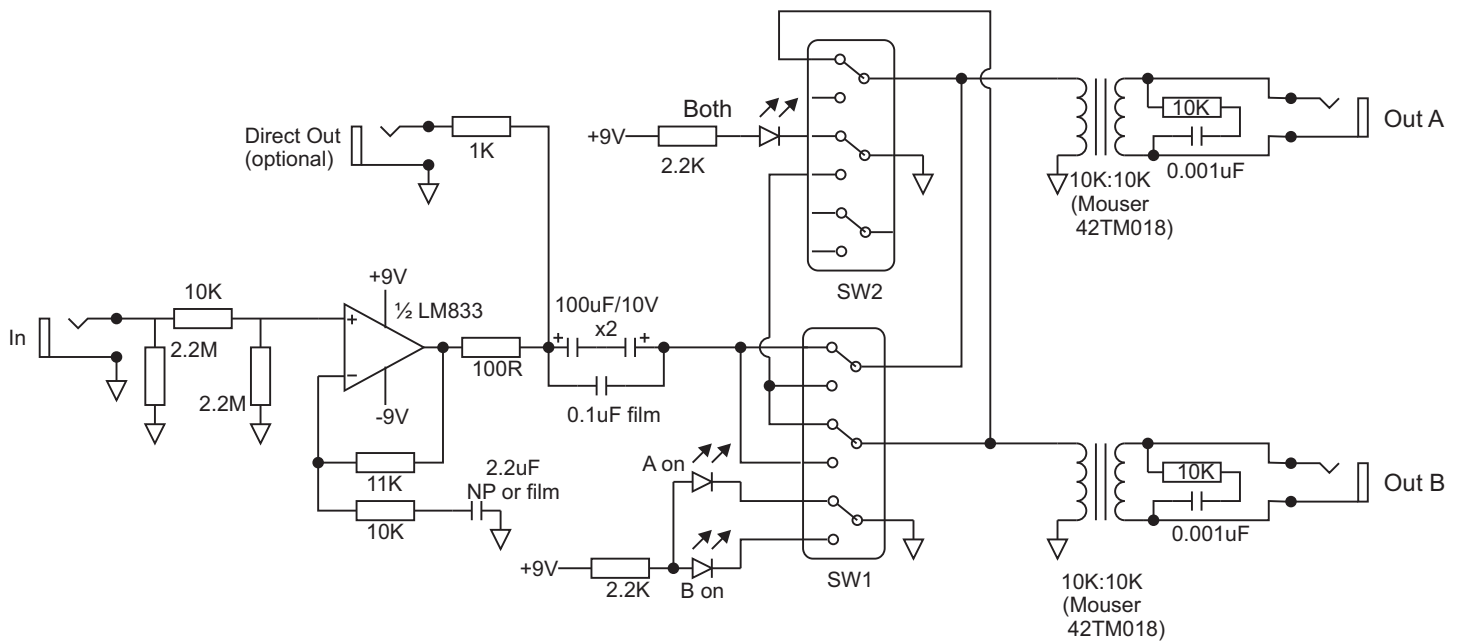


# Hum-Free(er) A/B/Y Splitter Box with Transformer Isolation



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It's hard for me to believe that it's been over twelve years since I first posted this one. But times move on, and with the feedback from people who have built it, I have come up with some improvements.

Hum is devious, and it slips in by many methods. The original circuit stopped humming while both outputs were used to drive individual amps, holding the non-identical "ground" voltages of the two amps out. However, if one or both amps are prone to it, they can hum from either transformer hum pickup or the high(ish) impedance of their transformer being open on the primary.

What's different about this version from the first is that the unused transformer primary is shorted to the input ground on both sides. This clamps its windings to both lower the impedance seen by the amp on its secondary and should help reject transformer hum pickup and any crosstalk between the two transformers.

What makes this possible is the advent of cheap 3PDTs. These things were once hugely expensive, but today, they're only a few dollars each. The extra set of contacts in SW1 lets me add a switchable ground connection for the "off" primary, and lift that for the "both" setting. I've shown SW2 as a 3PDT, which you may want for cosmetic consistency, but a DPDT works just as well, as you can see that one section of SW2 is unused.

I have left the power supply connections off in this version. I may add them later. Let me know if this works for you.