

Re: Simple line mixer designs

Source: <http://sci.tech-archive.net/Archive/sci.electronics.basics/2007-08/msg00148.html>

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 - *Date:* Tue, 07 Aug 2007 14:07:18 -0400
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BobG a écrit :

On Aug 6, 3:50 pm, Jean-Yvan Fradet <[jyfra...@xxxxxxxx](mailto: jyfra...@xxxxxxxx)> wrote:

I am currently looking to build myself a passive simple line mixer.

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The 'mixing resistors' keep the low output impedance sources from 'loading down' the adjacent output channel. Usually a mixer has a volume control to be able to actually control the mix. Are you mixing mono or stereo sources? This design is a 'passive' mixer. Next level up would use opamps to make a lossless 'active' mixer with master output level controls and some gain.

The original design is mono. But I intend to double the design to make it stereo. I would simply double the channels and link all grounds together. Buttons and eventual potentiometers would be double-channel for that purpose.

Yes, I might add potentiometers before the R1 to R3 resistors to control input level. The design for a passive stereo mixer with pots would then look like the image at the following link :

<http://www.geocities.com/jyfradet/images/Mixer2.png>

Note that there is an error on this image. The potentiometers input connections should be on pin 3 and output on pin 2. Ground remains on pin 1.

Also, I put a resistor after the switches. It would probably be better to put only one resistor before the divide to each output selection buttons...

Still, I need to know if I must add additional resistors or how this design would be safe.

By the way, if you have a simple design for a do it yourself mixer with

Re: Simple line mixer designs

opamps, I might as well go towards that solution.

But the idea behind my initial goal was to avoid adding power supplies in the first place. It's ok if I lose signal level a bit or if noise is generated from the resistors. The environment where the device will be used is noisy anyways...

Jean-Yvan

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