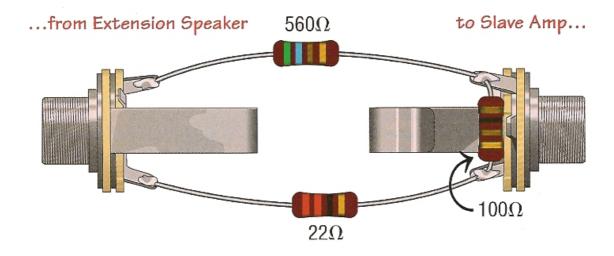
## Adding an additional "line out" jack to any amp

If your amp has an external "speaker out" jack but no "line out" or "preamp out" jack, you can use this simple circuit shown below to attenuate your output to a workable and good sounding line level. The shown values will work with almost every amp and are a good point to start from. Changing them will affect the sound, so feel free to experiment from there.



For all Fender amps I highly recommend to use a 470 ohm resistor where the 100 ohm is shown and a 2.6K instead of the 560 ohm - this will give you the optimum in sound.

Also, that 22 ohm resistor won't do anything if the grounds are connected through the chassis but it won't hurt to connect it, it is meant as a "soft grounding" resistor and will not affect your sound in any way. 1/2W for the resistors is more than enough for this application, but using higher wattage resistors is ok as well. Also metal film resistors will give you a different tone than carbon comp resistors, so feel free to experiment with them.

The sweet spot in terms of resistor values varies from amp to amp. Anything in the neighborhood of the shown resistor values should work, at least somewhat, but you can always start with a pair of pots (perhaps with a minimum resistance in series) to set the sweet spot. Once you find the sweet spot, you can wire in resistors of as close values as you can find.

And keep the speaker plugged in !!!!