Subject: Sovtek Mig-100, wiring question.
Posted by Jasper Lin on Tue, 07 Feb 2006 02:45:34 GMT
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a question about how sovtek mig-100s are wired. i'm looking to set up a full stack, and i've heard varying stories on how this can be done with my head. for those who aren't familiar, the mig-100 (not the 100H, 100U, or 100B...just mig-100) has 3 speaker outs on the back panel: one for 4, 8, and 16 ohms. two gear heads who i both usually trust gave contradicting answers. one said that any of these 3 outputs could be used in conjuction with each other. i.e. i could hook my 16 ohm marshall to the 16 ohm out, and a 8 ohm ampeg v-4 to the 8 ohm out. however, another person told me that these outputs were not designed for this purpose, and using them simulaneously like such would hurt my amp. they said my only real option is to rewire either of the two cabs to have parallel inputs/outputs, and only use one of the speaker outputs on the back of my head. any one out there have experience with these heads? i've had mine for 2 years and have always dreamt of using a full stack, but only recently acquired a suitable 2nd cab. shoot me a line if you know. Thanks, Jasper

Subject: Re: Sovtek Mig-100, wiring question.
Posted by Damir on Tue, 07 Feb 2006 13:25:41 GMT
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I don`t know the exact numbers, but for example, let`s say that your OPT is Raa=5kOhms to 8 & 16 Ohms secondary taps. Then your impedance(Z) and turns ratios (N) are:Z1 = 5000/8 = 625 , and N1 = 625^0,5 = 25Z2 = 5000/16 = 312,5, and N2 = 312,5^0,5 = 17,68If we have one 8-Ohms speaker connected on 8-Ohms secondary tap, then output tubes "give" power to the "nominal" 5kOhms primary, say 50W - and this 50W (neglecting losses) are transferred to the 8-Ohms speaker on the secondary. The same with 16-Ohms speaker connected on the 16-Ohms tap - output tubes "see" 5k primary and the same 50W from the primary is transformed to the 16-Ohms speaker on the secondary.If we connect both speakers, 8Ohms speaker on 8-Ohms tap, and 16-Ohms speaker on the 16-Ohms tap, then we have this situation:-total power on the primary is divided between the two speakers, W=W1+W2-primary load is expressed with the formula: 1/Raa` = 1/(16*Z2) + 1/(8*Z1) , from this new Raa` = 2500 Ohms!Our primary resistance that output tubes "see" is now halved. Is this of big concern in "typical" guitar amp - the answer from the literature/experienced authors is that you can operate your amp that way if it is "properly built", and on your responsibility Many amps can "survive" this without problem, but many warned that some amps are not the good candidates for this, for example Marshalls.
http://www.londonpower.com/faq.htm

Subject: Re: Sovtek Mig-100, wiring question.
Posted by tom on Sun, 13 Apr 2008 18:16:46 GMT
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You can set up a full stack by using two 4x12 cabs. In my case, i use two orange 4x12's. They each have an impedence of 16 ohms. The two together give an impedence of 8 ohms so you connect the first cab to the 8 ohm input on the head. Then run the second 4 x 12 out of the first 4 x 12 through the second input/output (first cab out of the head - second cab out of the first cab) Your cabs must be wired parallel for this to work. Your guitar tech can do this for you.
