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Subject: Re: A few useful documents

Posted by [Chris R](#) on Thu, 30 Oct 2003 18:04:52 GMT

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Hi Wayne, I'm looking at the Lab Circuits at the Pi-over, and the only thing not shown is the amount of attenuation you are getting. I'm assuming it's the 8:25, but I've forgotten how to translate that to dB. Is it 5dB?  $10 \cdot \log(25/8)$ ? Also, how does one go about picking values for different attenuations? On another note, from Ray Alden's book that RatShack sells, he provides formulas for attenuation that leaves the total load equal to the original driver. It's a series resistor and one parallel to the driver. I suppose it wouldn't lend itself to the HF comp. you use.

Comments? I've included the perl code if anyone cares. Chris./atten.pl -8 driver Z: [8.00] ohms Series resistor: [4.82] ohms Parallel resistor: [5.29] ohms#!/usr/bin/perl -wif ( ! @ARGV ) { \$drop = -6; # dB } else { \$drop = shift(@ARGV); } \$driver\_Z = 8; # ohms# split the load between the driver and the resistor \$Rp = (10 \*\* (\$drop / 20)) \* (\$driver\_Z / (1 - (10 \*\* (\$drop / 20)))); # calc the the combined impedance of driver and parallel# resistor, and subtract from original Z. \$Rs = \$driver\_Z - (1 / ((1/\$Rp) + (1/\$driver\_Z))); printf(" driver Z: [%3.2f] ohms\n Series resistor: [%3.2f] ohms\n Parallel resistor: [%3.2f] ohms\n", \$driver\_Z, \$Rs, \$Rp);

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