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Subject: Re: Channel jumping inputs fender to Matchless

Posted by [Damir](#) on Wed, 04 May 2005 17:44:22 GMT

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If we count in 68k resistors (and we should), then the situations are like that: a) 2 amps, both input 1 with  $R_{in}=1\text{Meg}$  with "Y" cord - guitar "see" the two 1Meg loads in parallel, or  $1\text{Meg}/2=500\text{k}$ . Three amps -  $1\text{Meg}/3=333\text{k}$ . b) 2 amps, "daisy chaining" - guitar in input 1 ( $R_{in}=1\text{Meg}$ ), then out through input 2 to the second amp and its input 1 again ( $R_{in}=1\text{Meg}$ ). BUT, we now have two 68k resistors in series between inputs 1&2 on the first amp, or in another words, guitar "see" 1Meg in parallel, then  $2*68\text{k}=136\text{k}$  in series, then 1Meg in parallel. The resultant resistance is now  $(1000\text{k}+136\text{k})//1000\text{k} = 531,8 \text{ kOhms}$ . Not much of the difference, but if we connect the third amp on the same way (another  $2*68\text{k}$  in series, and 1Meg in parallel) then resultant resistance is  $(531,8+136)//1000\text{k} = 400\text{k}$ , larger then "triple" Y-cord result of 333k. But, first amp get full signal voltage, and other two little attenuated signal through 136k/1Meg combinations. Normally, this is correct if the inputs are wired at the same way, you can try it with ohmmeter, amps switched off, cables installed. -All in all, you can try both solutions, but personally I don't like either of them, as I said, our tiny voltage/high impedance source (guitar PUs) probably needs better solution, see splitter, etc, theory.

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