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Subject: C1, 7.5 uF/440VAC

Posted by [PakProtector](#) on Sun, 23 Jan 2005 02:21:51 GMT

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it is indeed the output coupling cap. Since the impedance of a cap is  $1/j\omega C$ , we want the cap as large as is sonically reasonable. Forget about  $j$  and root negative 1. It is the real part of this we will look at. At 20 cps,  $\omega$  is  $2\pi \cdot 20$  radians per second and  $C$  is  $7.5 \cdot 10^{-6}$ . this yeilds 1061.03295 Ohms. At 40 cps, it is half that, and at 80 cps, half of that. This is close enough to the 10:1 ratio of input impedance to output impedance which keeps us from rolling off too early, even with a 10kOhm SS amp. For a 100kOhm Valve amp and several tens of pF of cabling capacitance, we're still good.regards,Douglas

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