Subject: Studio Two tweak - Wow!
Posted by wlutke on Mon, 06 Jun 2005 15:35:20 GMT
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Hi everybody,This tweak made such a difference that I just have to share it.I have my Studio Two's for what, eight months now I think. They came with the Motorola piezo and I later upgraded to Wayne's new Vifa replacement. That was a good decision, with no regrets. I posted a review if you care to search for it. But this new tweak, one I thought would most likely be marginally audible at best, has turned out to be unbelieveable (at least in my system). Ok, here it is. I replaced the inductors with .51 mH Solen 12 awg. Not cheap but well worth the investment. The Technical Stuff; That drops the inductors dc resistance from .5 to .14 Ohms. The Real World Stuff; On powering up my Bottlehead tube gear I heard a slight hum from the speakers that had previously been inaudible. A good indication of increased sensitivity from the woofer! But the proof is in the music. It's been a week now and my first impressions haven't diminished at all. I hear not a murky, fuzzy or bloated presentation but one that gives more substance to the midrange and heft to the bottom end. All of the detail and definition is there and nothing has been masked. Just a clean improvement. Ok, this is getting long so here's a link:http://www.partsconnexion.com/catalog/inductors.htmlPS - When I show these to the neighbors I no longer say they're a good speaker "for the money". They're just dang good.

Subject: Re: Studio Two tweak - Wow!
Posted by Wayne Parham on Mon, 06 Jun 2005 19:20:02 GMT
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I like using Erse coils for larger values (Greater than 5.0mH) for their reduced DCR, so that system Q isn't shifted up too much. With large coils, the woofers can get a little tubby if circuit resistance goes up too much. It's not usually a problem until you reach about 25% the value of voice coil resistance, but some systems are more sensitive than others.The stock 0.5mH coil used

Note Kit 2. Of those, the Audio Note and the Nelson Audio are SET amps. On the other end of

theater systems. Output circuit resistance is probably a little less an issue with solid state, until the resistance becomes pretty large, like half the value of the voice coil or so.I ran Paramours using stock output transformer and Solen parafeed cap, so I kinds of know what you're describing here. I used Valve Art and Electro-Harmionix tubes in my amps. I think I'd have to agree with you that slightly lower Q speakers tended to sound better with Paramours, and reducing DC resistance tends to push the system in that direction. Swapping the coil is an easy mod, and I'll bet it sounds good. Might also be worthwhile experimenting with replacing output transformers and maybe changing parafeed caps to see how that sounds too.

Subject: Re: Studio Two tweak - Wow!

Posted by wlutke on Mon, 06 Jun 2005 21:27:58 GMT
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Wayne - Thanks for the informative response. Now I'll have to go find out what Q is!I had subbed an Auricap 1.5 for the standard 3.3 parafeed cap supplied with the kit and that gave the biggest boost to the Paramour bass response. Doc B's "iron upgrade" output xformers were added later. I'd read great things about them but the truth is the effect was fairly subtle and mostly involved better detail. The new inductors in the Studio Two's, on the other hand, gave the sound a sophistication I hadn't thought possible from that package. Really smooth and effortless, two qualities that never came to mind with the stock inductors installed.

Subject: Re: Studio Two tweak - Wow!
Posted by Matts on Mon, 06 Jun 2005 21:57:34 GMT
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When you added the upgraded Iron, did you switch back to the 3.3uF (or so) parafeed cap? You should, if you haven't already. The 1.5uF caps raise the LF cutoff so the original xfmr could give better quality on "less" bass. The upgraded xfmr can give high quality bass even with the lower cutoff.

Subject: Re: Studio Two tweak - Wow!
Posted by Wayne Parham on Tue, 07 Jun 2005 04:15:15 GMT
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It sure doesn't hurt to go to a larger coil with lower DCR. The first coils I used were 20 guage, and they sounded great with most amps. But we replaced them with 18 guage coils simply because the cost difference was so small. That reduced DC resistance about 2/3rds. You can go with the 10uF Auricap on the tweeter, but the price jump here is not so small - The Auricap is about $40.00 more.

Subject: Re: Studio Two tweak - Wow!
Posted by wlutke on Tue, 07 Jun 2005 13:31:05 GMT
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I kept the 1.5 because my Two's are the bookshelf version and go only to 40 Hz anyway. It's an Auricap and the cost of a 3.3 probably wouldn't be justified. You're right about the 3.3's. If I build tower cabs I'll definitely switch back.

Subject: Re: Studio Two tweak - Wow!
Posted by Matts_ on Tue, 07 Jun 2005 19:47:43 GMT
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That's probably why you didn't notice much difference with the upgraded iron. I have the same speakers as you, and when I switched from the 1.5uF's to the 3.3's after putting in the upgraded iron it made a big difference in both the quantity and the quality of the bass. I was lucky and got the 3.3/660v Auricaps as a gift....

Subject: Re: Studio Two tweak - Wow!
Posted by wlutke on Tue, 07 Jun 2005 21:12:10 GMT
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I'll swap the 3.3 Clarity caps in and see what happens. Maybe later parallel the two Auricap 1.5's on one Paramour and compare to the Clarity 3.3 on the other. Right now I'm eyeballing the Auricap 10's at Parts Connexion for the Studio Twos - $25 each for the 200v version.

Subject: Try GE motor runs for the 10uF
Posted by GarlandGarland on Wed, 08 Jun 2005 17:40:23 GMT
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They sound great in my Theater 4s @ 20uF(I think it is)! Prob'ly cost less than $5 each.Garland