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Subject: \$ v. :-)

Posted by [PakProtector](#) on Sun, 02 Oct 2005 20:52:07 GMT

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Or...how inexpensive can one go whilst looking for nirvana?I know I like to see just how cheap I can get. Things like paying less for primo parts, or designing a circuit streamlined for using easy to acquire bits.I'll admit I come a bit on the complex and 'spensive end sometimes, but at that point, the performance is usually an eye opener...So,back to the question: how cheap do y'all get whilst getting the goods to deliver goose-bumps and grins?cheers,Douglas

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Subject: Re: \$ v. :-)

Posted by [Manualblock](#) on Mon, 03 Oct 2005 00:06:39 GMT

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Say Douglas; I think for the most part your part choices are pretty fairly priced; where can you get good transformers for 90\$ and inexpensive tubes and cheaply priced oil motor runs that if you had to use regular electrolytics in their place would run a lot of cash. My humble opinion the parts are very inexpensive so I wonder why you think they are up on the higher end of affordability.What I would like is for someone to share an easy way to breadboard. That would be helpfull in terms of changing out parts for experimentation. I found a site that had an amp built in stages using aluminum angle stock drilled out; like erector set rails. and constructed in squares with platforms of sheet stock cut to fit inside in various sizes for mounting transformers and such. I'm trying that out; with that capability of quick changing sections of amps it will be much more enjoyable trying different options.Thats the only thing holding me back.So what about things like adjustable caps and resistors and using bench-top power supplies for experimenting; do you do that? I think if there were more ideas concerning these issues there would be more participation. It's the cutting and drilling out that takes the time.Really what does it cost to make an e-linear amp once the trans are bought? Not much in real terms.

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Subject: mmmmmhfff....

Posted by [PakProtector](#) on Mon, 03 Oct 2005 01:42:15 GMT

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Well, now then...I guess I was looking at where the cheap line gets drawn. I agree on the effort part of the build. Cutting and mounting is a lot of work. I got called upon by a friend of mine who is engineering a minimum cost amp. 12AQ5's for the finals and 12AT7 for the input. \$20 output Iron and 'lytics everywhere. Voltage doubler PS...While the exercise on paper is entertaining, I don't think I'd take on such an amp. Major overhaul, and IMO as you noted E-Linear is quite easy and effective.I don't breadboard. I do some serious tweaking once I get it together in a chassis usually. It's why I don't use much of the 97/3 lead free tin and copper solder from Radio Shack. The stuff

does not play well with solder-wick. I have a bench top adjustable PS. Fairly potent, and enough to run a fairly healthy stereo amp. I don't use it much. I have seen some clip-lead nightmares and with a little one running all over the place I won't be doing \*THAT\* today. I like to build, then mod, then stretch some limits, rearrange the circuit...Bigger PS Iron, change things around in the front end. It can get ugly from time to time. Back to the question...is it better to go inexpensive at first and upgrade, or buy the expensive bits in the first place and then buy more experimental expensive bits as the development progresses? Does this change with the project? I must admit a certain joy at creating with the least expensive bits I can find, and designing around the shortcomings while taking advantage of the hidden strengths. But it's hard to eval something if one gets to marginal in the parts selection. cheers, Douglas

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Subject: Re: mmmmmhfff....

Posted by [Manualblock](#) on Mon, 03 Oct 2005 11:26:09 GMT

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I see your point and I did answer the wrong question. Building as cheap as possible then designing around the shortcomings? Interesting concept. As cheaply as possible would probably get you a decent sounding amp; right? So are you suggesting that this be a way to upgrade that would allow people a low initial entry fee; or is it a way to find out what the possibilities are? My question is regarding the cost of building it is all in the Transformers and chassis with a little in caps if you use real expensive ones so where would you save except in using dirt cheap tubes?

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Subject: Re: mmmmmhfff....

Posted by [PakProtector](#) on Mon, 03 Oct 2005 21:33:14 GMT

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I suppose it would depend on the definition of as cheap as possible. Take some common wisdom: pentodes suck, triodes are best. Or another fav: NFB is bad, only open loop can sound good. Or my least fav: SE is best and PP( I'll leave it to your imagination to fill in the proper curses ). I think you have to pick something which can work. Cheap for cheap's sake is not what I had in mind... There is also the matter of what constitutes good enough. That there are folks out there who can be happy with something out of the commercial, 60's OEM gear makes me sort of curious. It clearly points to a wide spread of personal taste. This is a good thing. If it weren't so, it would be easy to pick your performance bracket with a check-book. How good do you want it to sound? consults list... that will be  $n \cdot 10^a$ , with n and a being determined by the linear cost matrix.... cheers, Douglas

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Subject: Re: mmmmmhfff....

Posted by [Manualblock](#) on Mon, 03 Oct 2005 21:53:04 GMT

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I'm glad you answered the way you did because that is what I thought you meant. I examined every belief I had in audiophile in the past two years and demanded I have a reason for holding that belief. So a little NFB is good/PP done right sounds better to me; I don't have the experience to make a firm judgement on the triode pentode thing but my amp is PP pentodes so maybe that says something. I like the idea of using off-beat tubes not only to save money but to experience different types of sound. That's why the breadboarding thing is important to me; I'd like to try some of the older PP circuits with new and better made transformers. So to paraphrase; it's not cheap for cheap sake but the urge to explore while keeping costs down is the motivation.

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Subject: Re: mmmmmhfff....

Posted by [2wo](#) on Tue, 04 Oct 2005 00:37:48 GMT

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Hi all, On the subject of breadboards . We all know my love for cakepans, and they are great for a light, or semi permanent setup. But for an amp in progress, with lots of iron, I go to the Home Depot or Sears Hardware, and get a hunk of white shelf, cut into amp size bits. White because the surface is hard and smooth but you can drive a sheet metal screw with ease and these eyes can use all the extra light they can get. For connecting wires and bits together the barrier strips from Radio Shack work great. In the photo this is a whole full bridge rectifier . Most of the other connections are just holding wires of a multi-tap transformer till it's their turn. There is a similar setup on the low voltage side. For tubes right now I am using some commercial boards with post on the outside. I like them but there not cheap and I think I have a better idea for breadboarding, more next time. For working with octal tubes there are relay sockets with screw terminals available...John

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Subject: Re: mmmmmhfff....

Posted by [Manualblock](#) on Tue, 04 Oct 2005 01:31:34 GMT

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Thanks; just the stuff I had in mind; helpful hints. Great ideas. Did you see the post on erector set aluminum angle stock? What do you think?

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