Subject: Design of Guitar Amp
Posted by gofar99 on Thu, 18 Aug 2011 15:02:03 GMT
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Hi Everyone, This is a bit of a departure for me. I have been asked to design a tube guitar amp. I have lots of information on it, but wanted some thoughts on features that musicians really want or need in an amp. What is excess, what is essential? Some thoughts on tube types might also be useful.

Subject: Re: Design of Guitar Amp
Posted by Bill Wassilak on Fri, 23 Dec 2011 03:37:14 GMT
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What the hell for?

You can buy good tube guitar amps at a hell of a lot cheaper price than you can build one for.

Subject: Re: Design of Guitar Amp
Posted by gofar99 on Fri, 23 Dec 2011 04:01:27 GMT
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Hi Bill, maybe. But there have been numerous requests for one by folks who have heard the power amps I have designed. They don't seem to care about the cost. The clean channel is a snap. The other a little more interesting. But I figure I can design something that distorts properly just about as easily as something that doesn't.

Subject: Re: Design of Guitar Amp
Posted by chrisR on Thu, 09 Feb 2012 23:14:47 GMT
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How'd that turn out??? :^)

Chris

Subject: Re: Design of Guitar Amp
Posted by gofar99 on Fri, 10 Feb 2012 03:36:51 GMT
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Hi, Still in the works, I have most of the parts now, just need to get finished with some other projects. And get ready for LSAF in May.

Subject: Re: Design of Guitar Amp
Posted by Bill Wassilak on Wed, 04 Apr 2012 21:26:37 GMT
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It all comes down to the pre-amp stage and the type of tube you're using for that, can't remember right off hand but I think it's the 12AX..something, and depending on the level of signal going to it (aka pre-amp volume control) you can get a clean sound or overload the tube to get the distorted sound. The you run that sound to your tone control circuitry, then the rest is all the power stage preferably a non-distorted tube sound on the output.

Subject: Re: Design of Guitar Amp
Posted by gofar99 on Wed, 04 Apr 2012 22:04:53 GMT
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Hi Bill, That is generally the way to do it. Much of the gain will be coming from 12AX7s, but I have some thoughts that using a different tube (in this case a 12AU7) will allow better control of the distortion. The project is still on the back burner though.....other stuff keeps getting in the way.

Subject: Re: Design of Guitar Amp
Posted by AudioFred on Mon, 16 Jul 2012 15:22:12 GMT
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I keep this one at the house for my guitarist son to use when he visits, but he won't touch it because it doesn't have any bells and whistles. Just the on/off switch and a volume control. Want distortion? No problem. Just turn the volume up until it distorts. I suppose that's just too simple for the modern musician.

http://mercurymagnetics.com/images/pdf/schematics/wiring/E-VJ-schem1a.pdf

Subject: Re: Design of Guitar Amp
Posted by Bill Wassilak on Fri, 24 Aug 2012 23:01:05 GMT
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Heck Fred,
You got it going on, just add a simple 3 band tone contol circuit going on there (a few restistors and caps), for toneality, and he still won't blow you and your wife out of the house, on the amp you built for him.

And beside's just crank up them pi speakers and/or some Fred Arrays. so you don't have to hear him if you don't want to.