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Subject: High Power Tubes

Posted by [Wayne Parham](#) on Tue, 25 May 2004 07:25:51 GMT

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Ever seen one of these transmitter tubes? I found this link to Econco in one of the Google ads. Pretty interesting. Look at this military tube:

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Subject: Re: High Power Tubes

Posted by [metasonix](#) on Wed, 26 May 2004 05:07:09 GMT

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The upper photo is a TH347. Often seen in VHF-TV transmitters I believe. Lower looks like a water-cooled type for industrial RF heating use, not military. Econco's sales engineer is George Badger, who used to be president of Svetlana USA. I have contact info if you want to ask him questions about transmitting tubes. He worked at EIMAC for 40 years, making him one of the world's leading experts.

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Subject: Re: High Power Tubes

Posted by [Wayne Parham](#) on Wed, 26 May 2004 10:03:53 GMT

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Wow, small world! It was just interesting to me, without particular purpose. I saw the link on one of the Google ads at the bottom of a post, so I clicked on it and looked around. I remember seeing some people using transmitter tubes to build audio amps. High power SET amps, as I recall. Think of the transformers needed for that, huh?! Aside from financial concerns, what are some of the trade-offs you'd expect from using such a tube for high-power audio amps?

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Subject: Re: High Power Tubes

Posted by [metasonix](#) on Fri, 28 May 2004 02:01:01 GMT

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1. Most of them are medium-mu or high-mu triodes, or else tetrodes with very high transconductance. This tends to result in poor linearity. Tetrodes are usually ok if operated push-pull. 2. We are talking about power supplies of 5-20 kV at 1 amp or more. Filaments need scores or hundreds of amps. The power transformers end up weighing 200 lbs or more... 3. The output transformer will be huge, and VERY costly to make. 4. Large blowers for forced-air cooling, or else water connections for water cooling (and big water bills), are mandatory. Other than

that, they make great audio tubes.

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Subject: Re: High Power Tubes

Posted by [TC](#) on Wed, 02 Jun 2004 22:17:20 GMT

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>>. This tends to result in poor linearity.==Your honor, the witness is leading the jury without substantiation.>>4. Large blowers for forced-air cooling, or else water connections for water cooling (and big water bills), are mandatory. ==Oh behave.>>Other than that, they make great audio tubes.==my oh my...TC

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