Subject: Cathode Follower SET Amp Posted by FredT on Fri, 02 Nov 2007 09:28:03 GMT

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Here's an interesting new design. Cathode Follower SET Amp

Subject: Re: Cathode Follower SET Amp

Posted by SteveBrown on Fri, 02 Nov 2007 15:03:57 GMT

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Fred, it does look interesting, but I wish manufacturers would stay away from satements like this: "Traditional single-ended amplifiers have little bass drive below 100 Hz." What?? Of course, I guess if we're using "traditional" to mean an original WE 91 amp, maybe that's true. Anyway, would be an interesting little amp to audition.

Subject: Re: Cathode Follower SET Amp

Posted by real one on Fri, 02 Nov 2007 15:11:44 GMT

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I agree. That's a blanket statement that doesn't consider iron or wiring (parafeed, transformer coupled, etc.) I know that's a commercial site but it still bothers me to see marketing blather.

Subject: Re: Cathode Follower SET Amp

Posted by Thermionic on Thu, 08 Nov 2007 19:12:02 GMT

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Indeed. Depending on the low frequency cutoff points throughout the amp, and the output transformer design and its reflected impedance ratio, a SE amp can reach flat to below 40Hz. What the manufacturer doesn't mention is the one great inherit drawback of cathode follower output stages. Cathode followers have less than unity gain, so 100% of the voltage swing must come exclusively from the small signal stages. Most any small signal stage's distortion spectrum will be weighted heavier towards high order harmonics than a DHT power triode using a "traditional" output transformer output coupled configuration. This is especially true for cascode stages, and other super high gain small signal stages capable of such large voltage swings. Even a voltage amplifier stage using highly linear, low mu small signal triodes cascaded together won't be low distortion any longer by the time it has to swing a few hundred volts. There's a good reason

Subject: Re: Cathode Follower SET Amp

Posted by SASAudioLabs on Tue, 28 Jul 2009 22:19:06 GMT

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Thermionic wrote on Thu, 08 November 2007 13:12

Indeed. Depending on the low frequency cutoff points throughout the amp, and the output transformer design and its reflected impedance ratio, a SE amp can reach flat to below 40Hz.

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Thermionic

I absolutely concur with Thermonic and back him completely.

Take care.