Subject: JBL 2226H Parameters
Posted by rvsixer on Sat, 22 Aug 2015 21:21:02 GMT
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Survived a big layoff at work yesterday, so the focus of my 4pi build has changed from "all new all the best", to a budget build. The hunt for good used 2226H's started this morning.

I found some that have been tested with a Woofer Tester 2, parameters as follows:
Fs = 45.5 Hz (spec is 40.0 Hz)
Qts = 0.39 (spec is 0.31)
Qms = 3.38 (spec is 5.0)
Qes = 0.44 (spec is 0.33)

Do these numbers throw up any caution flags such as needing a recone (or having an aftermarket recone)? Or is this kind of variance expected/acceptable?

For the going prices on used 2226 woofers, if you add a JBL recone they almost cost as much or more than just buying new ! If that's the case I might have to consider a 3pi build instead, since the Definimax is bargain priced in comparison.

Subject: Re: JBL 2226H Parameters
Posted by Wayne Parham on Sun, 23 Aug 2015 15:07:00 GMT
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It's hard to say if those T/S specs are indicative of a substandard recone or not.
Electro-mechanical specs vary quite a bit with power used, so what you measure with a 0.1v signal is not the same as what you measure with a 0.5v signal.

But what will really tell you if the speaker is acceptable is acoustic measurements. The real tell is how the amplitude response looks above 500Hz.

Subject: Re: JBL 2226H Parameters
Posted by rvsixer on Sun, 23 Aug 2015 16:34:15 GMT
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Okay thanks for the explanation on parameters can vary with input conditions, I was not aware of that. Unfortunately no freq sweep graph is available for these particular drivers.

I am fairly sensitive to listening fatigue over long periods (I often have low/mid level volume music playing for hours at a time while working at my computer). I recall a post that you can listen to the

2226 for hours with no or minimal listening fatigue issues (this comment is the main reason I chose the 4pi over the 3pi).

Now that the Definimax 4012HO has been playing for a while in the 3pi, any comments regarding any listening fatigue experience compared to the 2226 driver? If minimal, the 3pi could be a good choice for me as well (while meeting my new budget).

Thanks again!

Subject: Re: JBL 2226H Parameters
Posted by Wayne Parham on Sun, 23 Aug 2015 17:05:47 GMT
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I find the Definimax drivers are very nice too. They pass the long-term fatigue test just like the 2226 drivers do.

Subject: Re: JBL 2226H Parameters
Posted by BobTahoe on Mon, 24 Aug 2015 19:45:29 GMT
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Since we are on the topic, and I need do test my own 2226H's.

I purchased 4 last year getting ready for the build non of them are new. 3 of them are said to come from a church and were used as sound reinforcement. All of them are supposed to be original cones. 3 of them still haven't been unpacked since purchase.

What's the best way to test them if you have them already?

I've thought about just mounting them in the 4pi cabinets I built and temporary sealing of the hole for the waveguide, Then I could run a sweep from 50hz - 1500hz.

I do have a UMIK-1 mic. The question is do I do it inside or outside? and what am I really looking for, a dip 500-800hz?

Subject: Re: JBL 2226H Parameters
Posted by Wayne Parham on Tue, 25 Aug 2015 02:38:13 GMT
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Measure at least 2M away and look for response that looks like the curve published by JBL. Best to lay the speaker on its back outdoors and suspend the microphone above it. Pay the most

attention to the response above 500Hz, 'cause that's where you'll find the most variation from substandard recones.

Since we're looking mostly at HF, you can do a pseudo-anechoic measurement indoors, if you're familiar with gating. But if not, measure outdoors using the method I described above.
JBL spec sheet

Subject: Re: JBL 2226H Parameters
Posted by rvsixer on Wed, 23 Sep 2015 17:44:10 GMT
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Since we are looking for response above ~500Hz, can the test be done without a box? Driver laying on floor, gating out the reflection(s)?

I ask because I have found a set of 2226H's locally, and the seller is fine with me testing them before purchase. Thanks in advance.

Subject: Re: JBL 2226H Parameters
Posted by Wayne Parham on Wed, 23 Sep 2015 18:44:32 GMT
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You're right that since we're looking at the response at fairly high frequencies, a gated pseudo-anechoic measurement will suffice. And box tuning isn't terribly important for the same reason. You can measure them on a baffle.
