Subject: Audio measurement tools
Posted by bcharlton on Sun, 03 Sep 2017 11:35:41 GMT
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Do you trust the tools that are downloadable for free? I noticed that there are quite a number on the several app stores. Which one do you prefer?

Subject: Re: Audio measurement tools
Posted by moss24 on Tue, 05 Sep 2017 07:40:23 GMT
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I would say the tool you choose will depend on the purpose. For instance, an audio designer will use a measurement to evaluate the performance of a particular equipment, whereas a maintenance engineer will be more interested in detecting any defects. The majority of us probably use this for health and safety purposes. I would invest some money to get a good measurement tool.

Subject: Re: Audio measurement tools
Posted by Wayne Parham on Tue, 05 Sep 2017 13:52:23 GMT
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I use LMS and WTPro. Neither are free though. Both use specialized hardware.

Subject: Re: Audio measurement tools
Posted by mamoss on Wed, 04 Oct 2017 16:23:09 GMT
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Haven't heard of good quality stuff being available for free for a long time. I believe that you have to incur some cost in order to get a good tool. I think I've heard of the WTPro. Is it Woofer Tester Pro in full?

Subject: Re: Audio measurement tools
Posted by Wayne Parham on Wed, 04 Oct 2017 20:23:42 GMT
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That's right - WTPro is made by Smith & Larson, the same company that made the original Woofer Tester. But WTPro is much more full-featured, including the ability to make acoustic measurements in addition to the basic electro-mechanical parameter measurements. And the

thing I really like about it is the Interactive Crossover Designer.

The ICD provides a mechanism to use a Spice model to create a digital filter. What this does it to allow a designer to enter the Spice model of a passive crossover and then to measure a loudspeaker using this digital representation of the crossover. The benefit is that crossover changes can be realized immediately, during measurements, simply by changing values in the Spice model.

I've done several designs with the ICD and it has proven to be 100% accurate. I am able to "dial-in" my crossovers, fine-tuning the on-axis and polar response using the ICD. When I am happy with the ICD measurements, I then build a physical crossover and measure again. It is an extremely useful design tool.

See a write-up of the ICD design process at the link below. It includes a link to a video where you can see the WTPro in action.
Crossover optimization for DI-matched two-way speakers