Speaking of speakers

M. Simon, Technical Contributor

The Consumer Electronic Show (CES) has been in the news at ECN, [1] but boy was I surprised when my home town paper [2] featured a CES story on its front page this past week.

The story was mainly about Prescient Audio, [3] a local company that has designed a new type of bass driver that will reduce the volume such drivers take up in cars.

Prescient Audio lists the specifications [4] for its driver including efficiency (.23% - 85.7 dB 1W/1M) and the Thiele Small parameters [5] necessary for designing an enclosure for the speaker. The low efficiency is not too much of a problem unless you are worried about battery life when the car is not running or you have an all-electric vehicle. The speaker is rated for 250 to 1,000 watts of driving power. That means it will produce 2.3 watts of audio at full-rated power. More than enough to drive anyone who still has their hearing out of the car. Not to mention annoying most people subject to drive-bys with a vehicle so equipped.

Prescient Audio also lists the specifications for a home audio driver [6] and a pro audio driver [7]. Funny, though. They list the same model of driver **PATD12** for all three applications. Their pictures suggest that the pros should use 10 of them. Prescient touts the fact that their speakers are American made [8].

> Though 80 percent of today's speakers are manufactured in China, Prescient Audio is committed to American manufacturing and production. Plans are being finalized to build Prescient ThinDriver in the heartland of the USA: Rockford, Illinois.

I wonder what these speakers would sound like in a ported box? Although with a 22 Hz resonance, the box is going to be rather large. You can learn more about the bass reflex and other enclosure designs at danmarx.org [9]. Even though I have been an audio engineer at various points in my career (WFMT, Chicago and Chief Engineer at WTAO, Murphysboro among others), I like the boomy audio that the bass reflex gives. Well, for rock music anyway.

M. Simon's e-mail can be found on the sidebar at Space-Time Productions [10].

Engineering is the art of making what you want from what you can get at a profit.

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