Subject: 1pi driver questions
Posted by absolootbs on Wed, 17 Dec 2014 17:46:12 GMT
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Any documentation or discussion I've seen of the 1pi always specifies the alpha 8 and dx25tg05-04 as the drivers. However, all I see available are the alpha 8a and either the dx25tg09-04 from meniscus or the dx25tg59-04 from parts express. All three of these have different t/s specs from their respective originals. Was the crossover revised at some point for the current versions of these drivers? If not, does anyone know if Wayne has verified the new versions to be drop in replacements with the original crossover? If the 1pi is purchased as a kit from Wayne, what are the drivers included with the kit?

I was hoping these questions might have been inadvertently answered in the plans, but since they weren't, I figure I'm sure to get clarification by asking here. Thanks in advance.

Subject: Re: 1pi driver questions
Posted by Wayne Parham on Wed, 17 Dec 2014 21:56:38 GMT
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The original design used the DX-25TG05-04, which is no longer available. The DX-25TG59-04 is currently in production, and it is a drop-in replacement for the original part.

The crossover is a simple first-order filter with a damping resistor. It is unaffected by the slight differences between the two parts, because both have Zmax around the same frequency and amplitude. The damping resistor swamps the differences in amplitude, which are slight. Beyond that, overall response and voltage sensitivity are very similar so the speaker maintains the same tonal character whichever of the two parts are used.