Subject: Pi 4 build and grilles
Posted by Phorize on Tue, 28 Apr 2020 20:20:28 GMT
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Hello all.

I'm planning my pi4 build. I'm considering using a front grille, an audio fabric type. Some designers report very modest differences with/without grilles-my understanding is that we are talking fractions of dBs. Are there any reasons for me to not do this with the pi4?

Kris

Subject: Re: Pi 4 build and grilles
Posted by Wayne Parham on Tue, 28 Apr 2020 20:28:18 GMT
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Even the most acoustically transparent grille has some effect on the sound. But it's worth it in a lot of cases for aesthetics, prying hands of small children, animals, etc.

What I like to do is to fashion a grille that can be easily removed, so I can "have my cake and eat it too."

One really cool way to do that is to install neodymium magnets in the grille frame, and matching ones in the cabinet. Cover them with veneer or some other coating so you can't even tell they're there. That way, the speaker can be used with or without the grille.

Subject: Re: Pi 4 build and grilles
Posted by gofar99 on Tue, 28 Apr 2020 21:01:58 GMT
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Hi, as a follow on I agree and have seen at craft stores thin plastic picure frames that you cut to fit the opening and could be fastened by the magnets. Just wrap the cloth around the frame and glue it on the inside lip.

Subject: Re: Pi 4 build and grilles
Posted by Phorize on Tue, 28 Apr 2020 21:13:49 GMT
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Wayne Parham wrote on Tue, 28 April 2020 15:28
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Thanks Wayne. It's the prying fingers that are my main concern, a removable grille with magnetic fixings is an excellent idea.

Subject: Re: Pi 4 build and grilles
Posted by Phorize on Wed, 29 Apr 2020 18:24:55 GMT
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More questions, thus time about drivers.

I noticed that pi4s used to use JBL 2426 compression drivers. Is there a reason why this was switched to the current options?

Subject: Re: Pi 4 build and grilles
Posted by Wayne Parham on Wed, 29 Apr 2020 21:59:12 GMT
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The JBL 2426H was our upgrade option for many years. It's a great driver, and the plans still list it and show the crossover parts needed to run it.

We later changed to the B&C DE250 because it also is an excellent driver, and it costs about a third of what the JBL driver costs. It actually measures a little better too.

driver and a JBL 2226H midwoofer. That makes an excellent speaker.

Similarly, the TAD TD-2002 is a compression driver I've considered listing as an upgrade option from time to time. It extends the top-end a half-octave, due to its beryllium diaphragm. It is very expensive, but for a price-no-object version of our speakers, mount one of those on our waveguide. It can't be beat.

But the DE250 is the upgrade driver we offer because it is just sounds so nice. It is detailed but still smooth, and it measures well. Its cost makes it a no-brainer, in my opinion.
