Subject: PI 4 Upgrades
Posted by docjrev on Wed, 21 Apr 2021 19:43:07 GMT
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Hi Wayne,
What improvement can I make to my 4 Pi just because. I already have the newer horns, JBL woofers, B&C tweeters, all Mills resistors, all Jantzen capacitors or should I just calm down and just listen to my Pi 4s as what I've been doing for the last ten years? Sorry for the rant. Thanks Wayne and Godspeed. :p

Subject: Re: PI 4 Upgrades
Posted by Wayne Parham on Wed, 21 Apr 2021 22:55:04 GMT
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If you have the H290C waveguide, it sounds like you're upgraded as far as you can go, at least as far as "factory upgrades" are concerned. You could replace the B&C driver with a TAD TD-2002, but I've never offered it because of the price. It isn't just "audio jewelry" though - its beryllium diaphragm provides extended HF without breakup modes in the top octave.

One other thing I might mention is multisubs. The four Pi design really benefits from at least a pair of flanking subs. Better still is to have a pair of flanking subs and a pair of distributed subs, placed further away and setup as multisubs.

So that gives you upgrade possibilities for both ends of the audio spectrum.

Subject: Re: PI 4 Upgrades
Posted by docjrev on Thu, 22 Apr 2021 15:34:24 GMT
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Thanks Wayne. I already employed 4 SVS subs with my PI 4. As for the TAD compression drivers, they are unobtanium at present. Any suggested substitute, say around or below $2000 range per pair, will be greatly appreciated. Godspeed.

Subject: Re: PI 4 Upgrades
Posted by Wayne Parham on Thu, 22 Apr 2021 16:57:48 GMT
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Have you tried the JBL 2426H?

Subject: Re: PI 4 Upgrades
Posted by docjrev on Thu, 22 Apr 2021 19:44:39 GMT
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Thanks Wayne. I will investigate. Are the JBLs bolt pattern compatible with the H290c?
Godspeed.

Subject: Re: PI 4 Upgrades
Posted by Wayne Parham on Thu, 22 Apr 2021 20:15:52 GMT
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No, they're not. You'll have to drill the H290C. When I had the mold made for the H290C, I wanted the extra thickness near the throat for strength, so I chose to omit the inner three mounting holes. The two-hole arrangement works for the B&C, Eminence and TAD drivers, as well as many others. But sadly, that makes the 2426 a little more work.

Subject: Re: PI 4 Upgrades
Posted by docjrev on Fri, 23 Apr 2021 17:36:21 GMT
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Thanks again, Wayne.

Subject: Re: PI 4 Upgrades
Posted by Jetpump on Sun, 02 May 2021 18:04:15 GMT
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Hi there,
Are there other Beryllium compression drivers that work with the horn such as Radian 475BePB?
Thanks

Subject: Re: PI 4 Upgrades
Posted by Wayne Parham on Sun, 02 May 2021 19:31:58 GMT
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The Radian 475BePB should work, but I haven't tested it. Not sure about the exit angle and whether it matches to entrance of the H290C. Also, you would want to match the sensitivity using R1/R2 values from the chart below:

dB	R1	R2

6dB	12 ohm	30 ohm
8dB	12 ohm	20 ohm
10dB	16 ohm	16 ohm
12dB	25 ohm	16 ohm
14dB	30 ohm	14 ohm
16dB	40 ohm	12 ohm
18dB	50 ohm	12 ohm
20dB	75 ohm	12 ohm