Subject: My audiophile Pi4 journey

Posted by Nick77 on Tue, 13 Nov 2012 11:35:25 GMT

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About six months ago i decided i wanted a change of pace from my OB speakers. I had numerous audiophile friends that had jumped on the CD bandwagon that had purchased Abby's and were touting their benefits.

I liked the looks of Wayne's Pi4 offering utilizing the 15" mid bass woofer. So i decided i wanted to take the design as far as i could utilizing premium components. I built the cabinets with 1" mdf and purchased Jantzen SuperiorZ caps, Mills resistors and Erse inductors and good copper binding posts. I had to use some Dayton caps i had on hand to complete the circuit.

I really liked the results but didn't have the level of resolution that i was used to. As i slowly upgraded the remaining lower quality caps the resolution increased and then installed a couple of teflon bypass caps in each circuit, now i had the resolution i was hopeful of.

I know most of the builds are for HT use and standard components are adequate but the design is worthy of high end parts if your looking for audiophile results.

File Attachments
1) pi4003-4.jpg, downloaded 4997 times

Subject: Re: My audiophile Pi4 journey

Posted by Nick77 on Tue, 13 Nov 2012 12:10:36 GMT

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Just recently i did another upgrade of which i was hardly prepared for the overwhelming results. I upgraded the internal wiring to the drivers and binding posts. I know the benefits of using good wiring and have experienced positive results with interconnects and speaker cables. (Not looking for any cable debate but to share my experience).

I thought i had used a decent hookup wire when i put the speakers together, solid core 16awg high purity copper wire. A buddy of mine that owns and makes high quality cables (Wywire) sent me a speaker wire harness that he makes for several high end speaker manufacturers. It consisted of high quality Litz copper wire for the tweeter circuit and thicker litz wire for the bass driver.

I got both speakers done and i cant believe all the performance that has been left on the table until now. The upgrade was akin to a new higher quality amplifier. Sound stage has increased, bass is deeper and tighter and the highs are detailed but smoother. I did one speaker first and compared the two, I had to unhook the undone speaker, it was as if it was shouting at me. It now sounded sibilant and distorted by comparison. Now that both speakers are done i am in heaven. The resolution and micro details are off the charts. The Pi4 is truely an audiophile speaker when fully utilized. The harness cost just over \$100 but has to be the greatest result for the money i have ever experienced. I have fairly high end electronics and your results may vary

but highly recommended.

So i feel like i have reached the end of my journey and now i can sit back and enjoy the fruits of my labors.

But i would be remiss if i didn't thank Wayne for his awesome design and generosity.

File Attachments

1) wywireharness002.jpg, downloaded 4769 times

Subject: Re: My audiophile Pi4 journey

Posted by Wayne Parham on Tue, 13 Nov 2012 18:40:22 GMT

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Those are excellent looking speakers, Nick. Thanks for taking the time to share your experience with them!

Subject: Re: My audiophile Pi4 journey

Posted by mantha3 on Wed, 14 Nov 2012 01:25:56 GMT

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Nice speakers!

I messed around with Jantzen caps in some Troels Gravsen speakers I built. I had trouble telling the difference from the newer Dayton precision 1% variance caps.

I run 14ga Meniscus audio air core inducers in my 4PI. I thought the bigger gage inducers made an audible difference in my other speakers so I went big on this. Meniscus is a good place and they build these custom and measure. You can even buy with slight +/- on the inducer value

I went with Dayton precision audio resistors. The newer line with a better precision % variance. Came close to going Mills. I wanted to get the resistor values exact to plan.

Perhaps some day I'll have to roll some new caps in my set. With more sensitive speakers perhaps I'll hear the difference more.

I did build my own RCA and XLR cables using .9999 % pure limp limp jewelers silver... Pretty easy stuff to work with. Buy raw in what ever gage you want from online jewlery cos and then just put some heat shrink on it and you have some of the best wire you'd ever need. I have thought about redoing the signal path on my tube amp with the stuff.

Just ideas. sometimes the "audiophile" tag gets put on products and the price is unreal high...

You buy the raw material and you get some killer performance with excellent value.

You've gone all out with your build. nice!

Subject: Re: My audiophile Pi4 journey

Posted by rkeman on Wed, 14 Nov 2012 13:13:50 GMT

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It is wonderful that the speakers are so improved. It would be interesting to measure the differences between the modified and stock 4Pi. Large perceived "improvements" from changes in passive components often disappear in carefully level-matched comparisons. Now adding acoustical treatments to the listening room ...

Subject: Re: My audiophile Pi4 journey

Posted by Nick77 on Thu, 15 Nov 2012 12:14:23 GMT

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mantha3 wrote on Tue, 13 November 2012 19:25Nice speakers!

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You've gone all out with your build. nice!

Thanks... there are several levels of Janzen caps, not sure which ones you sampled but the SuperiorZ are nice. Im not saying the Zcaps are the end all but rather using better caps as a whole if you want to extract the potential. I have a few Auricaps in the bass circuit and were

impressed with them also. In fact the Auricaps are Waynes premium preference and im sure i would be equally as impressed with them. The internal litz wiring seemed to just put the icing on the cake. I just wanted to make the point that the Pi4 has a lot of untapped potential from the basic build.

Of course any investment in premium parts is futile without the electronics to hear it.