
Subject: Re: New Project IC phono preamp
Posted by [gofar99](#) on Wed, 06 Mar 2024 19:18:26 GMT
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Hi For folks that figure the posted version is too complicated or costly this version is for those of you who can stand slightly reduced specs in exchange for a greatly reduced cost. It is like the high-performance version but uses standard components and a less complicated power supply. Common capacitors were used in place of selected premium ones and the first stage of the power supply was omitted. Additionally, it eliminated the switching between MM and LOMC as well as the adjustable loading for LOMC. These features can be added if needed by changing a few resistors. The actual performance is really quite similar to the more costly version and the sound is quite similar as well. This version would be fine for nearly any system.

Measured performance. It worked better with OPA2604 than with OPA2134. The 2604 had a lower amount of noise below 30HZ. This is opposite to the costlier version. Signal to noise wideband is nearly identical to the other version at -88 to -90 dbv. The level below 30 HZ was however about 3 dbv higher. The frequency response was similar but had a few variations. In the high-performance version, the response was virtually a flat line from 20HZ to past 25K HZ with a deviation of less than 0.1dbv. This version was down 0.2dbv at 20HZ, had a gentle rise of 0.2dbv centered at 200HZ and was flat at 20K HZ. Above that it rose about 0.5 dbv to about 75K HZ. Square wave performance was not as good as the other version. That one was clean from 50 HZ to 20K HZ with minor overshoot at 20K HZ. This version was clean at 50 and similar at 20K HZ but had rounding in the 2000 HZ range. This is probably due to some variation in phase shift in that portion of the equalization network. It is peculiar as this was not the case of the costlier version and the component values were the same.

Regardless it is a really nice sounding phono preamplifier that is inexpensive and easy to build.

File Attachments

- 1) [IC Less Costly Phono Preamp.jpg](#), downloaded 135 times
 - 2) [IC Phono PreampSchematic March 6 2024.jpg](#), downloaded 133 times
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