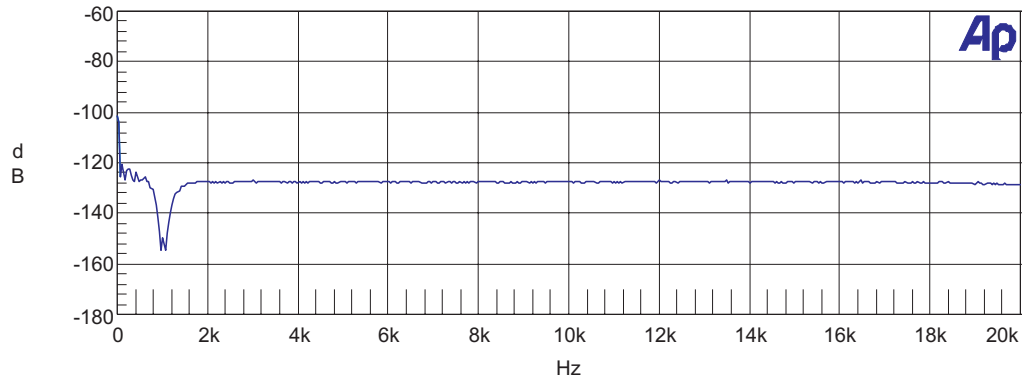
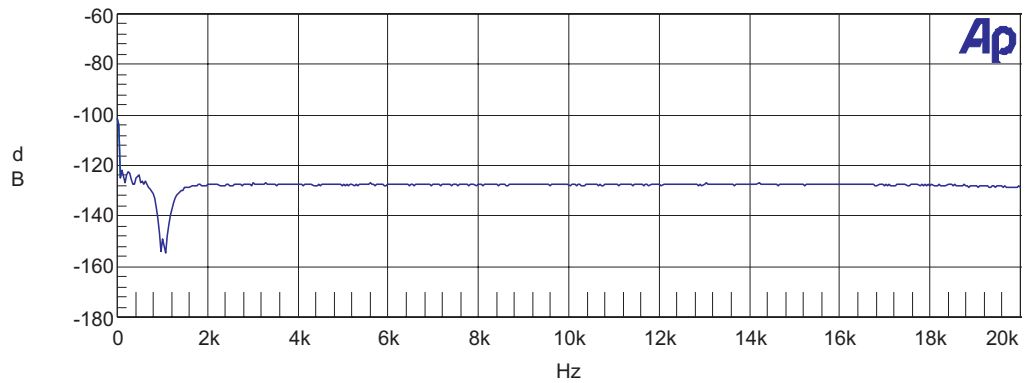


Page 1. THD spectra taken from four different cables. One was a cheap A/V cable: a triple coax with serve shield, all bare copper. One was a Japanese manufactured cable with audiophile pretenses by a brand named Hisago. It was the only cable in the test field I've actually listened to, and I remember feeling the sound was exceptionally appalling (without "e" and two "l").

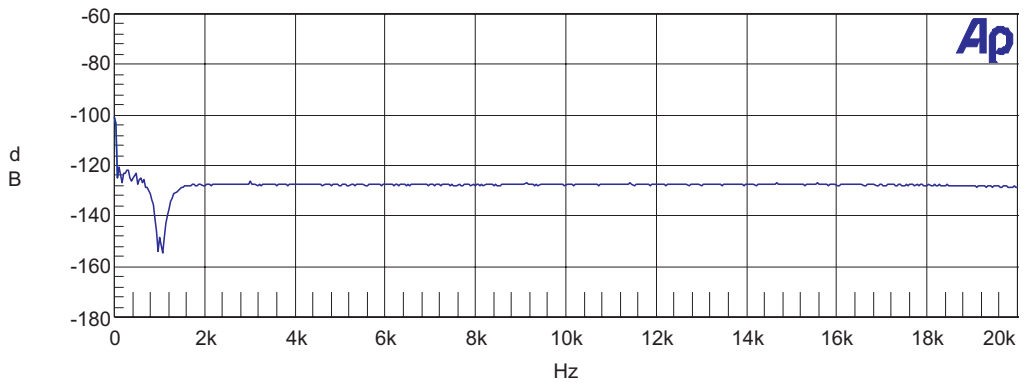
Conductors are bare OFC, insulator is foamed PE. The third cable was a 50ohm RF coax with solid PE insulator and bare copper conductor. Shield is tinned copper. The fourth is a coax with Teflon jacket (sheath), teflon insulator and silvered conductors/shield. Source setting was 1kHz, 30mV, 20 Ohms impedance. The plots show 256 times power averaged FFTs of the residual. This means the 30mV fundamental was notched out such that the distortion/noise performance of the ADC does not affect the result. All dBs are relative to the fundamental. The generator third harmonic at around -130dB just peeks out. No other distortion products are visible.



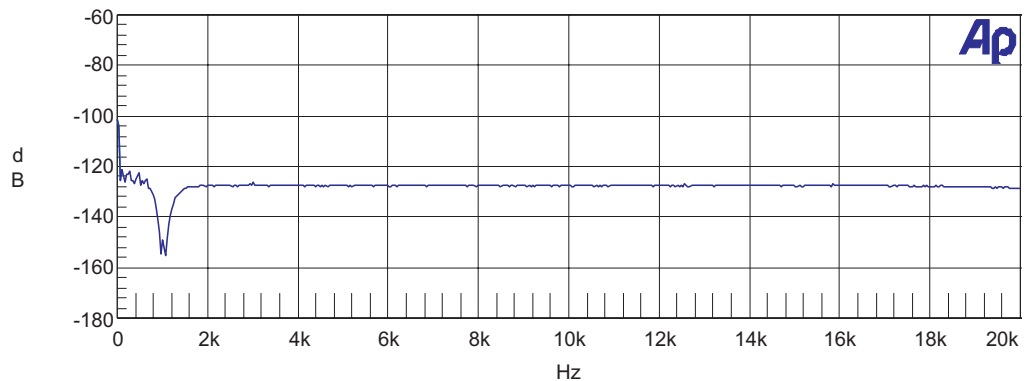
Cheap A/V cable



Hisago OFC

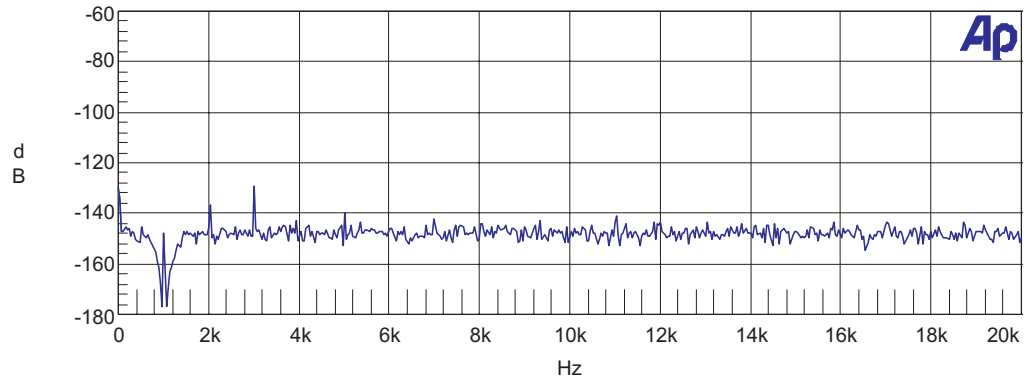


50 Ohms RF coax

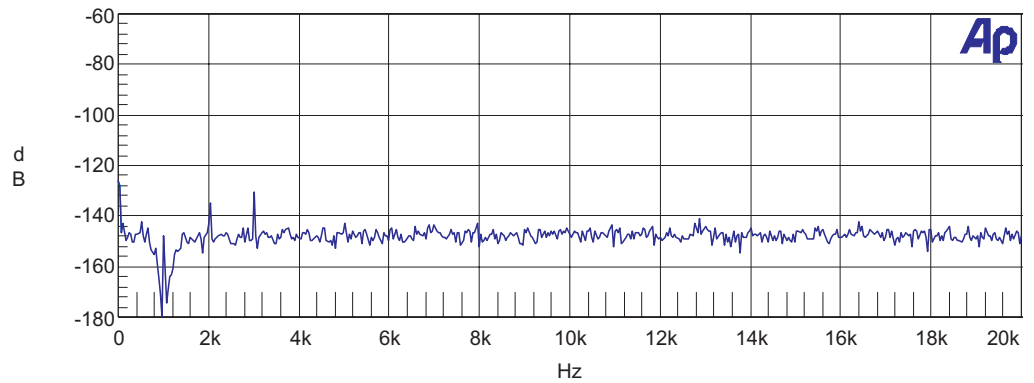


Silver-teflon coax

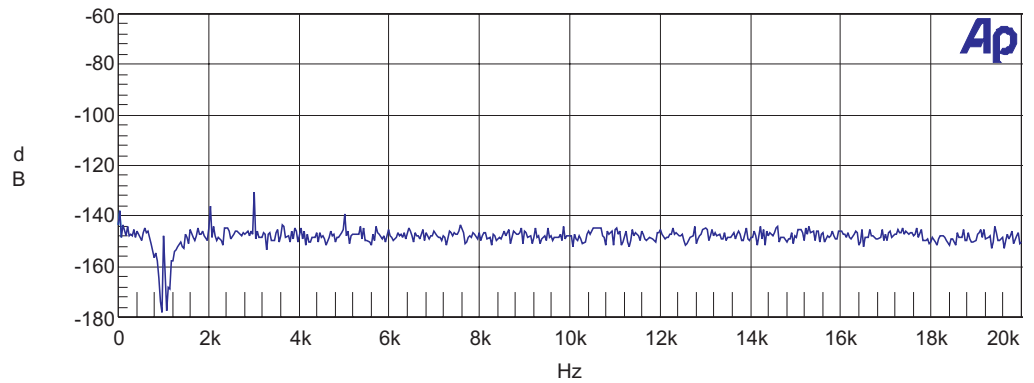
Page 2: Same objects, same test condition. The FFT analyser was now set to synchronous averaging. Instead of smoothing out the noise floor, it artificially lowers all non-synchronous components (ie. noise), allowing much lower distortion levels to be resolved. Third, second and fifth harmonic are visible, at the relative levels known from the generator. The noise floor also causes some statistical deviation of the measured levels of harmonics that are close to it. (most notably the 5th).



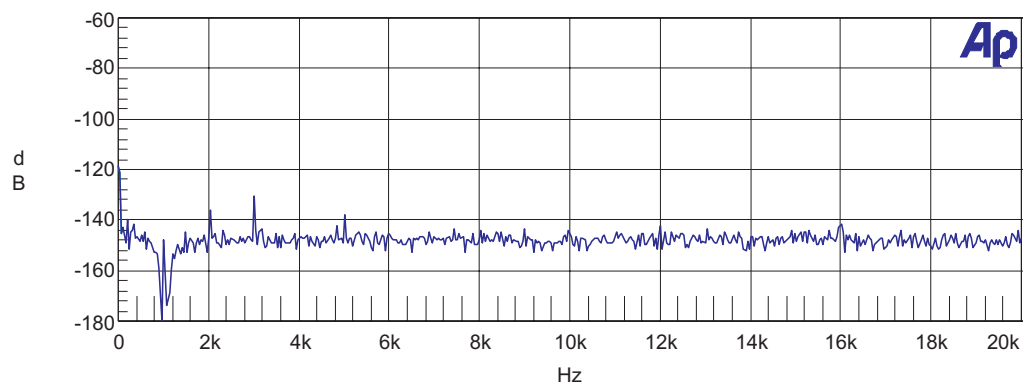
Cheap A/V cable



Hisago OFC

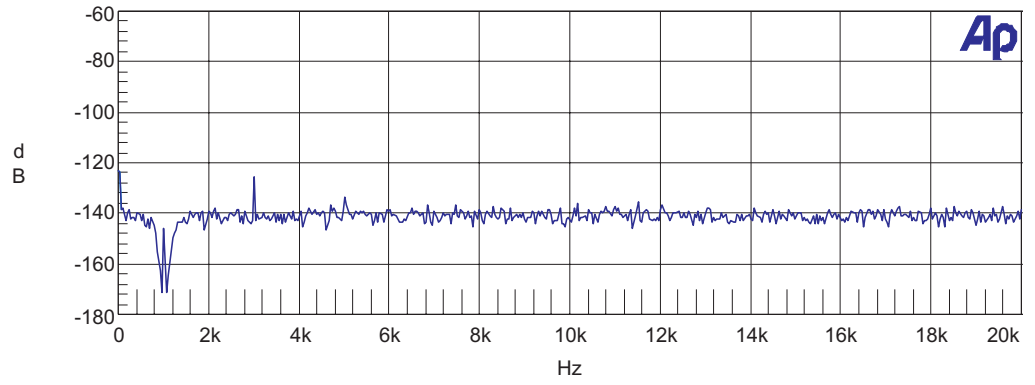


50 Ohms RF coax

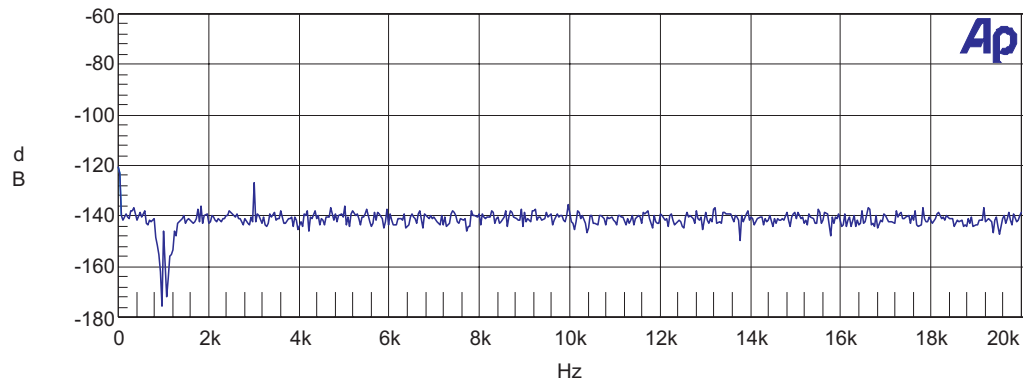


Silver-teflon coax

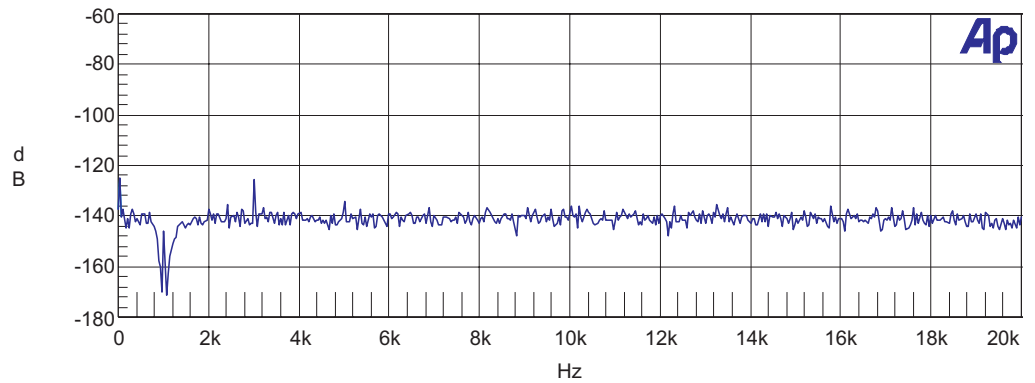
Page 3: The test of page 2 was repeated with the generator impedance and the input impedance set to 600 ohms. This should reinforce any nonlinearity present either in the dielectric or in the conductor. Note that the actual signal level on the cable is now 15mV, which accounts for the relative increase in noise level.



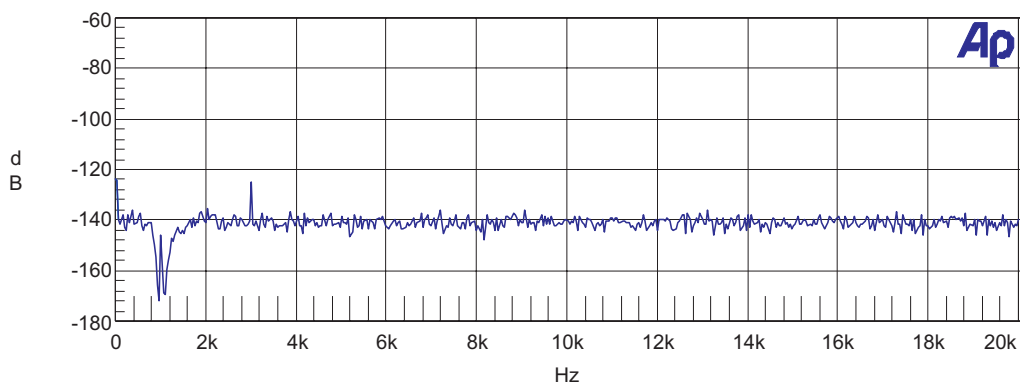
Cheap A/V cable



Hisago OFC



50 Ohms RF coax



Silver-teflon coax