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## HQ reference DAC ES9018S – USB PCM / DSD DAC - version 2 with DCD IV module

Measurement Report:

Used Instruments:

Analog precision 2700

All measurements are made on DAC VER2 production version.

### Total Harmonic Distortion (THD) on Balanced and unbalanced output.

Balanced output [Vrms]	THD [%]
DAC Volume at 0dB= 6,5	0,00405
DAC Volume at 3dB= 4,56	0,0024
DAC Volume at 6dB= 3,23	0,0016
DAC Volume at 9dB= 2,3	0,0014
Unbalanced output [Vrms]	THD[%]
DAC Volume at 0dB = 3,2	0,034
DAC Volume at 3dB = 2,28	0,023
DAC Volume at 6dB = 1,6	0,016
DAC Volume at 9dB= 1,14	0,011

Audio Precision A-A FFT SPECTRUM ANALYSIS 04/25/14 11:42:09

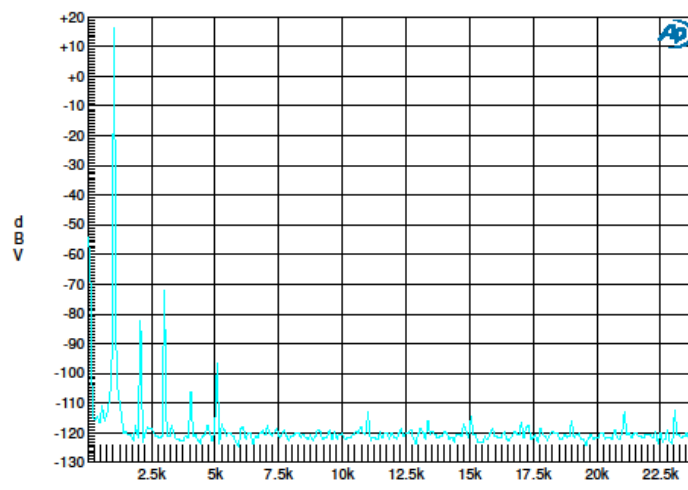


Figure 1 DAC\_VER2\_Production version\_volume @0dB\_balanced\_THD\_0,00405% output level 6,5Vrms.

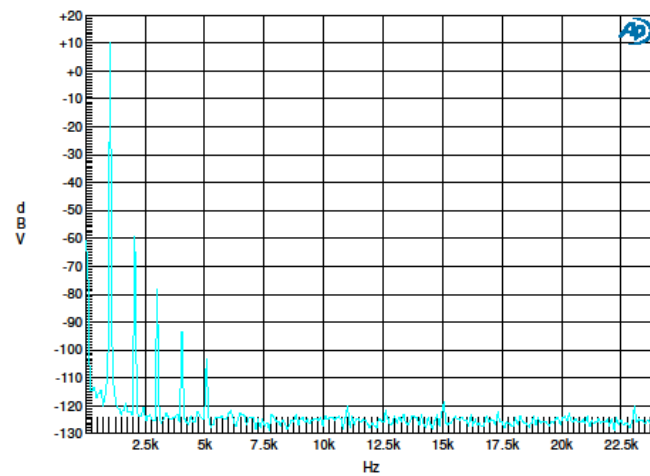


Figure 2 DAC\_VER2\_Production version\_Volume@0dB\_unbalanced\_THD0,034%\_ output level 3,2Vrms.

## Measurement on Clock input of DAC chip ESS9018

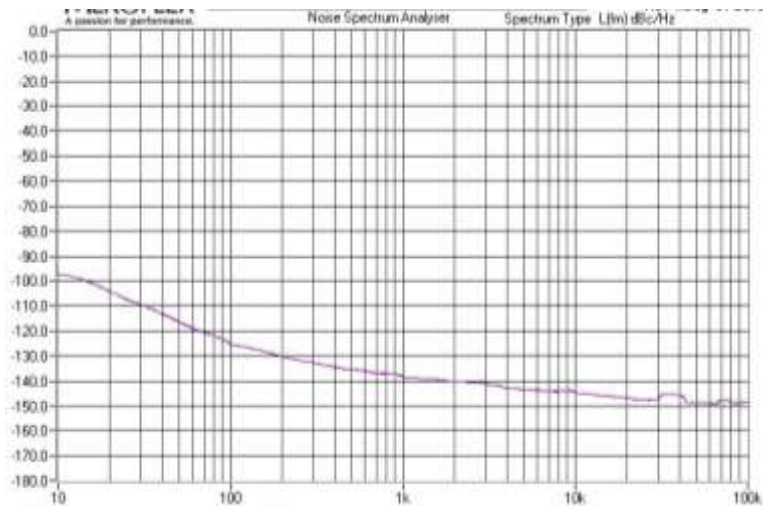


Figure 3 Phase Noise measurement of clock on input of ESS9018 DAC chip. Calculated jitter from this is 10Hz – 100kHz = 8,4fsec