

HQ Reference DAC ES9018S - USB PCM / DSD DAC Version 2	
Specifications:	
D/A Converter IC	ESS Technology ES9018S Sabre32 Reference DAC
Digital Specifications:	
PCM Sampling Rates	
Coaxial SP/DIF	44.1kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz up to 24bit
Optical (TOSLINK)	44.1kHz, 48 kHz, 88.2 kHz, 96 kHz up to 24bit
Asynchronous USB	44.1kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz up to 32bit
DSD Sampling Rates	
Asynchronous USB	2.8224 MHz (64Fs) 3.072 MHz (64Fs)
	5.6448 MHz (128 Fs) 6.144 MHz (128 Fs)
	11.2896 MHz (256Fs) 12.288 MHz (256Fs) Windows only
	22.5792 MHz (512Fs) 24.576 MHz (512Fs) Windows only
DAC Master Clock Jitter	< 0,082ps (82fs) rms
Digital Volume Control Steps	1 dB
Digital Volume Matching between Channels	< 0.1 dB
Digital inputs	
1pcs. USB Connector	Classic USB B, USB 2.0
1pcs. SP/DIF	75 Ohm, Coaxial RCA
1pcs. SP/DIF	Optical Toslink
1pcs. AES/EBU	110 Ohm, XLR
Number of channels USB	2 channels PCM, DSD
Number of channels SP/DIF	2 channels PCM
Operating System Requirements	
	MS OS XP to Win8 32-64bit: KS/Wasapi/WDM/ASIO Drivers
	MAC OSX 10.6 + (No drivers needed)
	Linux with UAC2 compliant kernel (No drivers needed) "eg Squeezebox Touch"
Analog Specifications:	
Total Harmonic Distortion + Noise,1KHz, 0dBFS	
Balanced output	0.0045%
RCA output	0.035%
Signal-to-Noise Ratio	
A-weighted,	128 dB
Frequency Response	0 Hz - 20 KHz (<0.1dB)
Channel balance	<0.02dB
Channel Separation	>130 dB @ 1KHz
Phase	
AES/EBU, SP/DIF:	Non-inverting / Inverting
USB:	Non-inverting
Digital Filter	
PCM	Sharp / Slow Roll off
DSD	47kHz/50kHz/60kHz/70kHz
Line Output	
Unbalanced	RCA (gold-plated contacts)
Balanced	XLR (gold-plated contacts)
(XLR and RCA line outputs can be used simultaneously)	
Max Level Unbalanced	3.25 Vrms
Max Level Balanced	6.5 Vrms
Impedance	< 25 ohms
Offset	< 3 mV
General Specifications:	
Mains Input	115V AC / 230V AC 50Hz/60Hz
Power Consumption	< 35 W
Dimensions	
(W x H x D)	TBD
Weight	X.X lbs (X.XXXKg)
	Spec sheet_Vc