

DAC-200ts

The Next Generation of Digital to Analog Converters



Over time, Cary Audio has developed quite a stellar reputation for our digital products. As the digital revolution continues to expand into higher bit depths and sample rates to accommodate an ever growing variety of digital source components like; portable devices, computers, network appliances, game consoles, disc players, and so on, Cary Audio has been at the forefront. From the early days of CD, DVD, and DACs, Cary Audio offered such features like computer USB inputs, digital upsampling, native DSD playback and more. Our new DAC-200ts is no exception and offers even more performance and features.

The DAC-200ts combines state-of-the-art digital processing capable of 32 bit/ 384kHz PCM signals as well as DSD64/128/256 signals. D to A conversion is handled by four (4) DAC chips consisting of eight (8) independent channels for true XLR balanced and RCA single ended outputs. Five (5) digital inputs including, Asynchronous USB, CSR aptX® Bluetooth, Coaxial (2), Toslink, and AES/EBU are featured on the DAC-200ts. Prior to the D to A conversion the digital signals are processed by a powerful 128 bit DSP engine to stabilize the signals, even the XMOS USB, as to remove any remaining jitter to a minute level using our OSO™ Reclocking. The DSP engine is also responsible for our TruBit™ Upsampling which allows the incoming digital signals, even our fi™ Bluetooth, to be upsampled to one of seven (7) selectable upsampling rates. As the signal is converted to analog, we've taken very special care to ensure an analog like musical texture as it moves into the analog output stage. Utilizing our renown DiO™ (Dual Independent Outputs) audio stage the DAC-200ts includes a separate vacuum tube output stage and a solid state output stage allowing for maximum flexibility for on-the-fly switching between tube and solid state stages. When combined with our TruBit™ upsampling and other benchmark features one can adjust the DACs sound to their source material always ensuring an engaging and breathtaking sound.

Product Specifications

Digital Inputs	USB x 1 BLUETOOTH x1 AES/EBU x1, Coaxial x2, Toslink x1
Digital Input Sample Rate	USB sample frequencies from 44.1 kHz to 384 kHz 16 to 32 bit, DSD 64, DSD 128 and DSD 256 BLUETOOTH sample frequency 44.1 kHz 16 bit AES/EBU x1, Coaxial x2, Toslink sample frequencies from 44.1 kHz to 192 kHz Accepts 16, 20, or 24 bits
Digital Word Clock Inputs	Support digital word clock frequencies 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz over Coaxial, Toslink and AES/EBU
Master Clock Jitter	Below measurable levels
Digital Filter	8x Oversampling Digital Filter
Digital / Analog Converters	Four (4) AK4490EQ (total 8 channels) for true balanced & single ended output
BLUETOOTH	CSR bluetooth v 4.0 with aptX low latency audio decoder
Analog Filter	3rd Order Bessel
Analog Outputs	Balanced XLR, Single – Ended RCA
Digital Outputs	Coaxial, Toslink output Sample Frequencies from 44.1 kHz to 192 kHz, 16 to 24 bit
Digital Word Clock Outputs	Supports output sample frequencies of 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4kHz, 192 kHz (with 75 OHM load)
Tube Complement	12au7 x 2
Control	Trigger input 12VDC x1 IR control x1
Communication	RJ45 full remote configuration interface
Power Input	Configured at factory for either 110-120 or 220-240 VAC, 50-60 Hz
Consumption	55 Watts

PLAYBACK LPCM 44.1 kHz to 192 kHz

Frequency Range	2 Hz - 22 kHz (44.1 kHz) 2 Hz -100kHz (192 kHz)
Amplitude Linearity	0.1 dB (20 Hz – 100 kHz)
Phase Linearity	3 degrees (20 Hz - 100 kHz)
Dynamic Range	121 dB (1 kHz)
Signal-to-Noise Ratio	113 dB (1 kHz)
Channel Separation	106 dB (1 kHz)
Total Harmonic Distortion	0.0004% (1 kHz)
Audio Output Level	2.0V RMS (220 Ω output impedance) at 0.0dB volume output 3.0V RMS (220 Ω output impedance) at 8.0dB volume output
Balanced XLR Output	2.0V RMS (440 Ω output impedance) at 0.0dB volume output 3.0V RMS (440 Ω output impedance) at 8.0dB volume output

PC-USB Playback (LPCM 44.1 to 384 khz AND DSD64, DSD128 & DSD256 file)

Frequency Range	2 Hz - 100 kHz
Signal System	1 bit DSD, 16-31 bit LPCM
Sampling Frequency	2.822 MHz to 11.289 MHz for DSD 44.1 kHz to 384 kHz for LPCM
Dynamic Range	123 dB
System Clock	Frequency 22.5792 MHz for DSD Frequency 22.5792 or 24.5760 MHz for LPCM
Signal-to-Noise Ratio	112 dB
Audio Output Level	2.0V RMS (220 Ω output impedance) at 0.0dB volume output 3.0V RMS (220 Ω output impedance) at 8.0dB volume output
Balanced XLR Output	2.0V RMS (440 Ω output impedance) at 0.0dB volume output 3.0V RMS (440 Ω output impedance) at 8.0dB volume output