Zdac Digital to Analog Converter



Superior Parasound sound quality at the price of an ordinary DAC



In a market filled with DACs, Parasound has set a new standard for performance and value with the help of acclaimed Danish digital experts Holm Acoustics.

The Zdac sounds more natural and less "digital" than DACs selling for far more because of its innovative design and high quality parts. Its unique re-clocking system preserves the original source audio data by eliminating jitter contamination that is picked up along the digital signal chain. This highly effective jitter-reduction system works on all inputs, not just the USB input, as in many other DACs. This is accomplished through the synergy of two premium parts, an Analog Devices AD1895 asynchronous sample rate converter and an AD1853 DAC IC, the same DAC IC that Holm selected for our Halo CD 1 CD player. To further improve sound quality the digital signal for all inputs is up-sampled to 422kHz.

The Zdac USB input uses a Texas Instruments TAS1020B USB receiver and Holm has written custom software to optimize the function of its phase locked loop (PLL), significantly enhancing sonic performance. This optimization provides a superior basis to get the most of the AD1895 and AD1853 combination to further reduce USB timing errors.

Most mid-priced DACs use a small external switch-mode "wall wart" power adaptor. The Zdac includes a built-in low noise linear power supply with a high capacity toroid power transformer for the cleanest possible sound, incredible dynamic range and high-impact bass response.

The Zdac has both RCA and balanced XLR outputs for use with premium quality preamps in high end music systems. The headphone output is driven by a dedicated high current amplifier with its own volume control. It will drive nearly all high quality headphones with ease. The Zdac includes fast-acting muting relays, usually found only on premium priced DACs, to eliminate any hint of transient pops or thump noises during turn on/off and when selecting inputs. Custom installers will appreciate that the Zdac immediately powers back up to the same input in the event of an AC power outage.

The Zdac's compact size belies its audio prowess and we invite you to compare the Zdac to DACs selling for over \$1000. Please visit our website to see additional photos, specifications and the Owner's Manual.



Features:

- Premium Analog Devices AD1853 24-bit/192 kHz Digital to Analog Converter IC
- All inputs feature jitter reduction and are re-clocked and up-sampled to 422 kHz / 24 bit
- USB input for playing music from PC or Mac (driver-less for easy setup)
- Asynchronous sample rate conversion for all inputs including the USB input
- Works with any format file on your computer up to 96 kHz / 24 bit
- Works in variable volume mode in Windows® for connecting direct to a power amp (no preamp needed)
- Optical and Coaxial digital inputs for use with any standard digital connection
- RCA unbalanced and XLR balanced analog outputs
- High current headphone output with volume control can drive any headphones from 32 to 600Ω
- Oversized internal toroid power transformer (not a wall wart like many competitors)
- Will always power back up to the same input in the event of an AC power outage
- Available in Silver or Black (Rack mount option available for Black units)

Specifications:

Supports Incoming Digital Word Lengths: 16 bit - 24 bit

Supports Incoming Digital Sampling Frequencies:

Opt & Coax: 8 kHz, 11.025 kHz, 16 kHz, 32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz.

USB: 44.1 kHz, 48 kHz, 88.2 kHz and 96 kHz

Up-sampling Frequency: 422 kHz / 24 bit (all inputs)

Sample Rate Converter: Analog Devices AD1895

D to A Converter: Analog Devices AD1853

Frequency Response: 20 Hz to 20 kHz ±0.2 dB

Channel Balance: < 0.05 dB, 20 Hz - 20 kHz

Channel Separation: > 95 dB, 20 Hz - 20 kHz

Signal to Noise Ratio: 110 dB, A-weighted

THD + Noise: < 0.015 %

Audio Output Level: Unbalanced: 2.1 V RMS (Balanced: 4.2 V RMS)

Output Impedance: Line out: 160 ohms, balanced or unbalanced / Headphone out: 10 ohms

AC Power Requirement: 10 watts (110-130 VAC 60 Hz or 220-240 VAC 50 Hz) Selector on Bottom

Dimensions: Width: 9.5"(241mm); 8.5" - 220 mm (silver) Depth: 10" - 254 mm

Height, with feet: 2" - 51 mm; without feet: 1.75" - 45 mm

Weight: Net: 5 lbs (2.3kg) / Shipping: 8 lbs (3.7kg)

Rack Mount Accessory (Black Zdac only) purchased separately:

SBS: Side by Side Mounting bracket / Zblank: Panel extender (Silver Zdacs cannot be rack mounted)

Parasound Products, Inc., 2250 McKinnon Ave., San Francisco, CA 94124 / 415 397-7100

For more photos, features, specifications and product manuals, visit us at www.parasound.com