

THE REMARKABLE PRODUCT

MÉTRONOME TECHNOLOGIE DSC MINI

Where technology fades to let music shine



Métronome Technologie is a Toulouse-based company founded in 1987 by Dominique Giner. It has earned an enviable reputation in the ultra-high-end market with the Kalista series. By offering DSC mini DAC, Métronome Technologie is entering a new era, enabling a wider audience of enthusiasts to access the cutting-edge technology of the French manufacturer at a more affordable price.

DESCRIPTION

Designed to connect to DDS 2 streamer transport (€4590) via I2S (HDMI), DSC mini is compatible with any device equipped with a coaxial S/PDIF, AES/EBU, Optical Toslink, or USB input.

It incorporates a ESS Sabre ES9038PRO conversion chip and features highly efficient management systems.

The inputs accept PCM and DSD signals from 44.1 to 384 kHz/32 bits for HDMI I2S, S/PDIF, AES/EBU, and USB inputs. The Optical Toslink input is limited to 44.1-192 kHz/32 bits. It decodes native DSD up to DSD512, all PCM files up to 32 bits/384 kHz on the USB port, and supports the MQA codec. Its analog

outputs come in two types: unbalanced with RCA connectors (3 V RMS at 0 dB – 100 kOhms) and balanced with XLR connectors (3 V RMS at 0 dB – 150 Ohms).

Its 3.5-inch screen clearly and legibly displays all relevant information with a resolution of 320 x 240 pixels. It allows switching between input connections and displays the sampling rate of the current track. The brightness is adjustable on five levels and can also be turned off. The DSC mini chassis is made of solid aluminum and comes in two finishes: black and silver.

LISTENING TESTS

We tested DSC mini with a Sony transport connected via Optical (TOSLINK) and the Naim Audio ND5 XS 2 streamer connected via coaxial (S/PDIF). Signal modulation was entrusted to the Naim Audio Hi-Line cable. We also connected the Grimm Audio MUI network player, which we had for testing, to the S/PDIF input and then to the AES/EBU input, particularly for playing High-Res files. We did not test the I2S (HDMI) input or the USB-B (PC) input.

Of course, DSC mini is designed to

deliver the best musical experience on high-definition files, and we took full advantage of this. However, since the vast majority of albums are in 16-bit and 44.1 kHz, we primarily conducted our tests in this format, as shown in the photo featured at the beginning of this article.

What struck us first was the smoothness of the sound, masterfully handled by DSC mini. The sometimes clinical precision of digital audio gave way to a definition that was refined and subtle. We never detected any harshness, not in the tuttis nor in the crescendos. While I'm inclined to believe that the ESS Sabre ES9038PRO conversion chip contributed to this successful sound signature, I am deeply convinced that the power management and analog components selected for Métronome played an essential role in the density and soundstage delivered by DSC mini.

This led us to question Jean-Marie Clauzel, co-director of Métronome, who put us in touch with Cyril Monestier, head of the design office. In summary, here's what they explained to us:



ORIGINE : FRANCE

(fabriqué à la main en France)

DIMENSIONS (L x H x P) :

250 x 70 x 250 mm

POIDS : 4,8 kg

FINITIONS : Noir ou silver

Livré avec câble d'alimentation, certificats de conformité et de garantie)

PRIX : 4 950 €

SITE DU FABRICANT :

www.metronome.audio

DISTRIBUTEUR POUR LA FRANCE :

www.jffdiffusion.fr

"Despite the compact size of DSC mini, the electronic architecture of this DAC is built around nine entirely independent regulations. The regulators used are of extremely high quality, with operational precision and stability close to the microvolt level. However, the main quality lies in the 'noise,' or 'electrical interference,' which is extremely low (Ultra-Low-Noise High-PSRR LDO regulators). These various regulators are naturally paired with specific capacitors placed as close as possible to the different circuits to guarantee quality and stability for all the DC voltages, which are very sensitive to disruptions.

Upstream of all the regulations, we use two toroidal transformers encapsulated in resin. They offer very low losses (98% energy efficiency = minimal heat generation) and high performance. The first transformer powers all the digital electronics, while the second transformer is dedicated solely to powering the high-quality operational amplifiers present in the analog output stages as well as those used for current-to-voltage (I/U) conversion at the DAC output. Regarding the analog stage, we use a dual pair of operational amplifiers to convert the positive and negative outputs of the left and right channels from

the DAC (which, as a reminder, are current outputs) into voltage outputs.

Why a dual pair? Because we use one circuit per side, and each circuit consists of two independent operational amplifiers. Thanks to the quality of the selected operational amplifiers, exceptional analog performance is achieved, offering a wide frequency spectrum, excellent separation between notes, precise instrument positioning, deep soundstage, smooth transitions between frequencies, and more. Fundamentally, this results in unparalleled analog sound, which is one of our signature strengths."

Indeed, the superiority of this DAC lies in its ability to deliver a very natural sound, often described as analog, as opposed to the cold and artificial sound often (and wrongly) associated with digital audio today. The proof lies in its handling of vocals—provided one has heard them in person, not through a filter of speakers or headphones. On this front, DSC mini proves astonishingly realistic. When technology serves music, it results in a device of this caliber.

VERDICT

The Métronome DSC mini is not only a high-level, versatile, and compact DAC but also, thanks to its functionalities, the ideal partner for the Métronome DSS 2 network player or Métronome Le Streamer, as well as for any other server/streamer from another brand, which it will elevate through the excellence of its circuits. Highly musical and strongly recommended.

Jean Razzaroli