

# REVIEW METRONOME – DSC mini

#### Métronome DSC mini Reviewed – A Compact DAC with Reference-Level Sound

Métronome Technologie presents an exceptionally impressive product lineup with its so-called Métronome DS Range, as the Métronome DSS 2 Network Player and Streamer can be paired with the outstanding Métronome DSC mini D/A converter upon request. A perfect duo from France, as our detailed review revealed.

#### In brief

It is the central component of the Métronome DS Range and an outstanding D/A converter, Métronome DSC mini, designed as the perfect companion for Métronome DSS 2 Network Player and Streamer.

Uncompromising quality and,

thus, high-end HiFi in the most compact form — this is the primary goal set by the French HiFi manufacturer Métronome Technologie for its so-called Métronome DS Range. This product line stands out particularly because, at first glance, its solutions have little in common with traditional HiFi components. However, upon closer inspection, it becomes clear that all the expertise accumulated over decades at

Métronome Technologie has been poured into the development of the Métronome DS Range.

An impressive example of this is Métronome DSC mini, a key solution within the entire Métronome DS Range. It is a D/A converter designed to deliver outstanding quality in a compact form, proving to be a product that encapsulates all the expertise of Métronome Technologie.

#### Métronome Technologie – The French Digital Specialist

Métronome Technologie was founded in 1987, and since its



acquisition by Jean-Marie Clauzel, the company has evolved into the modern, technology-driven manufacturer it is today. The company operates from a state-of-the-art production facility in the south of France, with the industrial hub of Toulouse nearby, as well as the picturesque town of Albi.

When considering the product range of Métronome Technologie, which also includes the particularly exclusive solutions developed and manufactured under the Kalista brand at the same location, it quickly becomes clear that the company is a recognized digital specialist.

Streaming, CD players, SACD players, and D/A converters are the main product categories that the company focuses on, each in a

distinct form. For a company as relatively small as Métronome Technologie, its product range is surprisingly broad. With this, Métronome Technologie aims to offer a selection of systems that can best meet the individual needs of even the most demanding audiophile HiFi enthusiasts, and rightly views this as one of the company's key strengths.

#### The Métronome DS Range – Digital Sharing

The fact that Métronome Technologie approaches some things a bit differently, and perhaps occasionally in an intentionally unconventional way, is evident in the naming of its entry-level line, which is presented in the form of the Métronome DS Range.

DS stands simply for Digital Sharing, and with this, Métronome Technologie refers to all the possibilities these solutions offer in relation to digital data.

The current generation of the Métronome DS Range was introduced with Métronome DSS 2 Network Player and Streamer, which is essentially a pure streaming

transport. It is a solution that does not include a built-in DAC, leaving that task to an external specialist. Accordingly, Métronome Technologie paired it with a D/A converter, which is the subject of our current review.

The latest addition to the Métronome DS Range is Métronome DST CD Transport, a



While the way source devices deliver data to the D/A converter is undoubtedly of great importance, the focus here is specifically on a disturbance-free signal transmission with perfect timing. The "sound signature," if we may call it that, is ultimately determined by the converter itself.

#### **The First Contact**



solution for playing audio CDs at the highest level. As the name suggests, it is not a CD player with an integrated DAC, but rather a pure CD transport, leaving the task of converting the signal from digital to analog to Métronome DSC mini.

### Métronome DSC mini – The Central Interface of the Métronome DS Range

It can certainly be stated that Métronome DSC mini is entrusted with an immensely important task. Métronome DSC mini is designed to be the perfect companion for Métronome DSS 2 Network Player and Streamer, and as a result, it can also be ideally combined with the new Métronome DST CD Transport. This is ensured by a consistent design line that the developers have now strictly

followed across the entire Métronome DS Range.

As we mentioned earlier, the products of the Métronome DS Range differ significantly from traditional HiFi components, especially when considering the rather substantial dimensions of other product lines from Métronome Technologie, such as the Métronome Classica Range or the Métronome AQWO Series.

Our test subject, Métronome DSC mini, measures a modest

250 x 70 x 250 mm but still weighs a solid 4.8 kg.

And this, as we can reveal upfront, should be seen as a clear indication that this compact converter from France fundamentally differs from many offerings on the market, which, when reduced to mere numbers on a datasheet, may seem quite similar but are by no means in the same league.

But for now, let's focus on the superficial appearance of Métronome DSC mini, whose design is deliberately somewhat minimalist, yet elegantly mini are the USB port in USB-B format and the HDMI-executed I2S connection.

The USB port allows Métronome DSC mini to be connected directly to a PC or Mac, enabling the full resolution that the converter is capable of, thanks to asynchronous data transmission.

The same applies to the I2S connection, with the added benefit that it offers the technically optimal signal transmission, something that Métronome Technologie itself always emphasizes.

Analog signals can be output either unbalanced via a pair of RCA jacks or balanced via a pair of XLR connectors.

Up to 32-bit and 384 kHz – DSD up to DSD512

Let's continue with a

straightforward look at the numbers and explain what Métronome DSC mini is capable of when it comes to signal conversion with the highest precision from digital to analog.

Through the optical S/PDIF connection, signals in Linear PCM can be transmitted up to 32-bit

and 192 kHz, with DSD also supported, including DSD64, using DoP (DSD over PCM).

The coaxial S/PDIF connection and AES/EBU allow Linear PCM signals up to 32-bit and 384 kHz, as well as DSD up to

DSD128, with DoP also being used in this case.

Only I2S ensures that, in addition to Linear PCM signals up to 32-bit and 384 kHz, DSD up to and including DSD256 can be processed natively.

The same applies to the USB port, where PCs or Macs can transmit data not only in the form of Linear PCM up to 32-bit and 384 kHz, but also native DSD up to DSD512.

### DAC from ESS Technology Inc.

When given the opportunity to speak directly with the developers, one can often come to surprising conclusions. For example, engineers like Cyril Monestier, responsible for development at Métronome Technologie, place much less emphasis on certain aspects and set priorities quite differently.

While many tend to describe with great emphasis the special converter used, Métronome Technologie mentions it almost in passing. In fact, it's just a line in the datasheet that reveals Métronome DSC mini uses a D/A converter from ESS Technology Inc., specifically the ESS Sabre ES9026PRO DAC.

Of course, one cannot just choose any component, say the developers at Métronome Technologie, as that is a given. However, in the end, even the best DAC is of no use if it is not



understated.

The front features a generously sized 3.5-inch display with a resolution of 320 x 240 pixels, clearly displaying all relevant information. All settings can be easily adjusted using buttons. The customer can choose between a silver or black case, which is framed in stainless steel with aluminum elements.

# All the relevant interfaces are there

A look at the back of Métronome DSC mini immediately reveals that all the relevant interfaces are present. You'll find both optical and coaxial S/PDIF connections, as well as an AES/EBU connection. However, it's clear that the most important connections of Métronome DSC



implemented optimally and if the circuit design does not perfectly harmonize with the specific characteristics of the DAC.

# The Key to Perfect Signal Processing – An Optimal Power Supply

The key focus at Métronome Technologie is, above all, an optimal power supply, and this also applies to Métronome DSC mini. Even in this "small" device, they use no fewer than nine completely independent power regulations, each of the highest quality for maximum precision.

For example, Ultra-Low-Noise High-PSRR LDO Regulators are used, each paired with specific capacitors. The board layout is also designed so that the separate power supplies are placed as close as possible to the various circuits, ensuring the quality and stability of all DC voltages and thereby preventing noise from the outset.

All power supplies are fed by two toroidal transformers, which are encapsulated in resin, as highlighted by Métronome Technologie.

One of these toroidal transformers is dedicated solely to the digital components of Métronome DSC mini, while the second drives the current-to-voltage (I/U) conversion at the DAC output and the analog output stage.

## **Analog Output Stage – Double** is better

The output stage of Métronome DSC mini uses high-quality operational amplifiers, with two pairs of these components being used to convert the positive and negative outputs of the left and right channels from the DAC.

This results in the very distinctive sound character that is said to define all solutions from Métronome Technologie, which the manufacturer describes as having a particularly "analog sound."

#### From Practice

This brings us to perhaps the most important point, the sound of Métronome DSC mini, as we don't need to say much about its ease of use in everyday life. As already mentioned, the source device is ideally connected via the I2S of Métronome DSC mini, and in our case, it was Métronome DSS 2 Network Player and Streamer.

The operation of Métronome DSC mini is ultimately limited to



selecting the active input, nothing more needs to be done. The display shows the selected input and the currently incoming signal type.

We can now turn directly to our impressions that we gathered during the extensive test of Métronome DSC mini.

And it is, above all, the very special sound character of the D/A converter that impresses. Even without a direct reference, it always conveys recordings in a highly detailed, precise, and yet very relaxed manner. One always has the feeling that exactly what should be there is being presented, no more, no less.

If you are lucky enough to own an album for which you were actually present during the recording, and thus know firsthand how it should sound, the impression is confirmed. Moreover, the promise from Métronome Technologie to offer a converter with Métronome DSC mini that provides an engagingly natural reproduction, with an analog-like character, proves to be completely accurate.

## Prices and Availability.

Métronome DSC mini is available in specialty stores at the recommended retail price of €4,890. As mentioned, you can choose between the black or silver variants.

### In our opinion...

There are things that fit together perfectly, as if they were made for each other. This is exactly the case with Métronome DSS 2 Network Player and Streamer and Métronome DSC mini, as becomes clear when you experience this duo in harmony. The most remarkable thing is that such a level of quality is delivered in such a compact form. Here, HiFi

is offered at reference level, essentially as desktop audio solutions. A clear recommendation, even if the source device is not from Métronome Technologie. DACs that perform at this level are not so commonly found, especially not in such a compact form.