

Metronome DSC put to the test - the fascinating 3-in-1 reference system

There are many streaming systems on the market, and a wide variety of manufacturers offer their solutions across the most varied of price ranges. So what can a streaming solution from a proven digital specialist such as Metronome Technologie offer, which, like the Metronome DSC, sees itself as a reference solution, and where one speaks of not having to make any compromises?

Michael Holzinger

Metronome DSC is the name of the solution that the French high-end specialist [Metronome Technologie](#) provides as the central component for music streaming at the very highest level. DSC, this abbreviation stands for Digital Sharing Converter and, in principle, describes quite well that a holistic approach is being pursued here, i.e. the topic of streaming is covered in the broadest sense in such a way that users actually receive a one-stop solution that does not compromise in terms of flexibility and quality.

Actually, the Metronome DSC should be called a three-in-one solution, because streaming is its primary task, but only one area that this solution ultimately covers. From the point of view of metronome technology, a D / A converter and a digital pre-stage are also part of the basic equipment of a streaming system and thus of the Metronome DSC. With this optimally coordinated combination of three essential functions, the perfect basis for streaming is offered at the level of quality that the French want to guarantee.

Metronome DSC - The high-end plug & play "three-in-one" device

It seems interesting that the French specialist makes people sit up and take notice with a term that one hardly expects in this price range, namely with the term Plug & Play, which is often used and often overused in the IT environment.

Plug & Play means nothing more than a particularly simple installation and handling, the user is supposed to be conveyed that he is acquiring a solution, the functionality of which he ultimately does not have to worry about. Why, why, and how something works here is completely irrelevant, it just works.

And that brings us to a very crucial point, a feature that is clearly the focus of solutions such as the Metronome DSC and explains why we speak of Plug & Play.

Specialists such as Metronome Technologie try to address a target group with their products who want to use the advantages that streaming generally brings without having to accept the disadvantages that can also come with it.

As a customer, you leave it completely to a proven specialist to think about how to best perform the task at hand, while you yourself benefit from the end result of this sometimes complex development process.

Streaming - a very complex topic

It has to be stated quite frankly that streaming can be quite a complex topic in general, even if it is often described as simple, even downright simple.

Data is "stored" somewhere that is sent over the network to the streaming client, which processes it as precisely as possible, ensures that control is as simple as possible, and at best is intuitive, and either presents it itself via an integrated converter or an external converter in the best quality. At least that is the theory.

But streaming means that IT and hi-fi have to play together as perfectly as possible, and we know that IT can be a very complex topic with many pitfalls in practice. At least it is a topic that you have to deal with if you want to make the best possible use of solutions in this environment.

Let's just tell the truth, the bottom line is that a streaming client is and remains nothing more than a "computer", so at least some specialist knowledge is of interest, even if nowadays nobody wants or has to deal with the actual inner workings of such solutions .

A streaming client is a computer

This has been true from the beginning, for example for those solutions that could be used for the first time for music playback on the PC in the 1990s and thus ultimately justified the topic of streaming. The resentment of many audiophiles that one could not leave the valuable music to a disdainful PC probably also originated from this time. And in fact, it was above all IT companies that established the topic of streaming in the broadest sense, such as Logitech, Creative Labs or Terratec, some may still remember these companies. And as early as the 1990s there were some providers who dealt particularly intensively with this topic and were anxious to offer quality, although these approaches were also to be found in IT alone.

Streaming in the field of consumer electronics only picked up speed with solutions from Apple Corporation or Sonos Inc., it then began to become interesting for hi-fi enthusiasts when, in the lead, two English hi-fi manufacturers - Linn and Naim - presented corresponding solutions.

Nowadays, streaming is the predominant topic in all consumer electronics, thus also in the world of hi-fi and even the designated high-end hi-fi. But it is still true that at its core every streaming client is a computer ...

But why are we so careful to make this point clear to you, dear readers? Well, it is the linchpin in understanding what distinguishes solutions like those from Metronome Technologie, and specifically the Metronome DSC.

Here, too, it is essentially a computer, at least when it comes to the part that is designed for streaming. And as everywhere else, it is also true here that not all computers are created equal, that solutions can also be implemented in the IT environment that differ in quality from the rest of the offerings on the market. Is quality a question of performance?

Especially when it comes to IT, to computers, if you will, performance is of course extremely important. It is absolutely essential that data, and nothing else is involved with audio signals in digital form, can be processed with the appropriate performance. This is the only way to guarantee accurate playback based on a constant data stream. However, it should be said at this point that modern computer systems have long since reached a performance class that offers more than sufficient performance. When we talk about streaming, it's not just about audio, but also about video, and modern solutions allow streaming in unprecedented quality and resolution. 4K or even 8K are possible without any problems, although this not only includes the actual video content, but also hi-res audio even in surround sound.

Just audio streaming in stereo, be it studio master quality with 24 bit or even 32 bit, even DSD in all varieties, none of this poses any real problems when it comes to performance when it comes to performance. Compared to video, this involves significantly smaller amounts of data that have to be processed accurately.

Much more decisive for the question of quality is therefore how the data is handled, but especially how the data is kept away from disruptive influences. If you look at a streaming client as a "computer", very practical questions arise

about the selection of the right components, the optimal structure of the circuit and, last but not least, the best possible shielding of particularly sensitive components.

Can you leave music to a "PC"?

In view of the tough price war on the market, many companies rely on standard components, so the basis of many streaming clients is often similar, even if they come from different manufacturers.

A look inside some of the current solutions shows this clearly, as well as the fact that there is often only a tiny circuit board to be found, apart from that the stylish case appears quite empty. Even if it is not just a pure streaming client, but possibly also a streaming client plus an integrated D / A converter.

Highly integrated circuits make this and much more possible, even a preliminary stage can still be used without any problems, i.e. essentially exactly the range of functions that metronome technology also promises for the metronome DSC ...

But we can promise you one thing, most of the solutions on the market have nothing to do with those from Metronome Technologie, rather the Metronome DSC is in a completely different league, yes, you could definitely say in a league of its own.

But what exactly is it that makes Metronome Technologie different from many other providers and thus should help the Metronome DSC to achieve an outstanding position on the market? Let us now pursue this question. But first a little family history.

Metronome digital sharing range

The Metronome DSC comes from a whole family that summarizes metronome technology under the term digital sharing and thus the **metronome digital sharing range of** the same name and which, in addition to the metronome DSC, also includes the metronome DSC1 and metronome DSS systems.

As the name suggests, the Metronome DSS Network Player and Streamer is designed solely as a streaming client, the Metronome DSC1 Converter and Streamer has a D / A converter and the Metronome DSC Digital Converter, Streamer and Pre-amp combines all functions that Metronome Technologie can offer in this product line and this clearly represents the flagship of the series.

Metronome DSC - Digital Sharing Converter

"Digital sharing", this description stands for metronome technology and above all for streaming, which is why we have so far mainly spoken of a streaming client. The fact that two more essential components are added here - a D / A converter and a digital pre-stage - makes the Metronome DSC a real plug & play system that can be described as a "three-in-one" device.

Cable or WiFi?

First of all, the Metronome DSC is first and foremost integrated into the network via a cable, for which an Ethernet interface is available. The scope of delivery also includes a WiFi adapter in the form of a USB dongle that corresponds to IEEE 802.11ac.

Hand on heart, we would give preference to the cable in any case, this only as a side note.

UPnP as a basis

When it comes to streaming, Jean Marie Clauzel, owner and designer of Metronome Technologie, trusts UPnP in particular, and that is simply a logical decision.

Even if there are numerous streaming platforms and technologies on the market, UPnP is still the only actual industry standard. All other platforms and technologies are developments from one manufacturer, even if some of them are used by various other companies, i.e. be licensed.

With UPnP and the DLNA licensing of the Metronome DSC, which is also shown, it is guaranteed that maximum flexibility is maintained for all components that make up a streaming system. This starts with the central storage systems, a so-called NAS (Network Attached Storage), via any streaming clients that are also used in the house and are centrally controlled, and extends to the apps that provide precisely this convenient control are essential.

The user can choose the optimal solution for him in all areas and is not limited to this or that manufacturer.

However, this does not mean that popular online offers are left out, this is expressly stated.

TIDAL, Qobuz, Deezer, Spotify ...

The Metronome DSC can of course be used to access the most important services, provided you have the appropriate subscription. The streaming offer from TIDAL and Qobuz can be used as well as that from Deezer. This means that more or less all the music playback offers that are relevant for discerning hi-fi enthusiasts are available, so you can access millions and millions of music titles in at least "CD quality", as well as thousands upon thousands of albums in hi-res audio.

It is exciting that Metronome Technologie has also decided to support the Spotify service, even if it has not yet been able to provide an offer designed for demanding users.

In this regard, it should be said that Spotify's offer will also improve in the near future in terms of the quality offered, and when viewed soberly, it is the service that has by far the most customers due to the largest offer and unique functions, including many hi-fi enthusiasts. So it wouldn't be a wise tactic to just rule them out.

Roon soon as a further option

Users who want to stream on what is currently by far the most flexible streaming platform Roon from the software company **Roon Labs LLC**. will find in their app that the Metronome DSC already appears in principle as a streaming device, but is still provided with a notice that the certification has not been fully completed.

When this certification process has been completed by the manufacturer, the Metronome DSC will be marked as **Roon-ready** so that you can use RAAT (Roon Audio Advanced Transport) as a streaming client to use the in-house media management and Multiroom audio streaming solution Roon Labs LLC. Bit-perfect music streaming to offer.

Internet radio

So that we don't forget, the Metronome DSC also allows Internet radio, via the vTuner service. This may not seem essential to some, as these are offers that "play" far, far away from high-end hi-fi. For many music enthusiasts, however, the advantage of being able to access a wide variety of content from around the world in the simplest possible way prevails here.

As far as the topic of streaming, we now consider the component that takes on the signal processing of the streamed content on the one hand, but also ensures that the Metronome DSC is open to other source devices in the hi-fi network ...

Signal processing with 32 bit and 384 kHz, DSD512 and MQA

The heart of the signal processing in the Metronome DSC is a D / A converter of the type ESS ES9038PRO, which uses a dual-mono structure and supports signals in linear PCM with up to 32 bits and 384 kHz and thus in the

format known as DXD, and who is also prepared for content in DSD. The spectrum even extends to signals with DSD512.

Content encoded in the lossy MQA compression method with DRM (Digital Rights Management) is also processed here, which is particularly interesting for those users who rely on streaming services with appropriately encoded content.

Versatile D / A converter

In order to do its job as a D / A converter as best as possible, the Metronome DSC offers an abundance of interfaces. First and foremost, there is an optical and coaxial S / PDIF interface on the rear of the system, as well as an AES / EBU and HDMI interface. However, it should be noted here that it is not a conventional HDMI interface, but rather what is known as an I2S interface, which, as many experts believe, is by far the most reliable way of transmitting audio in digital form. Incidentally, the full resolution is only obtained via this I2S interface; it also supports linear PCM and DSD, whereas the other interfaces mentioned so far are limited to linear PCM with 24 bit and 192 kHz.

Of course, USB ports should not be missing, there are four of them on the Metronome DSC. Two are designed for the direct connection of appropriate storage media so that music can be played directly without a network infrastructure.

The third USB interface (USB Type B) is used for direct connection to a PC or Mac, so that the Metronome Digital Sharing Converter can be used as an outstanding audio interface. It goes without saying that an asynchronous data transmission is relied on here, in which the Metronome DSC alone has control over the data and its timing, so that as little jitter as possible occurs. The Metronome DSC can also exploit its full potential via this USB interface and reproduce content in linear PCM and DSD. This is especially exciting when you use solutions like Audirvana Studio, this should be mentioned in passing.

The last remaining USB interface in our list is marked as "Service", so it has no function for the user.

Preamp with unique volume control

In its function as a digital preamp, the Metronome DSC has one outstanding feature, namely the so-called Leedh Processing Volume Control. Here Metronome Technologie relies on the cooperation or partnership with Leedh Processing and thus guarantees a volume control with no loss of resolution. This alone influences the signal amplitude and, moreover, does not cause any changes in the signal quality.

Unbalanced as well as balanced output stage

At the analog level, audio signals leave the Metronome DSC either in asymmetrical or symmetrical form. Not only is a pair of cinch sockets available as an analog output, but also a pair of XLR connections for a balanced connection, in this case directly with a pair of active loudspeaker systems or a power amplifier.

Simple operating concept

The front of the Metronome DSC has nothing more than a rocker-shaped volume control, a status LED and a very large display. And this display serves as the central control element, because it is a touchscreen display.

At the bottom you select the active input or the streaming option or playback directly from USB, and you can also control the volume here. In principle, that's about it. You don't need more. But that's not entirely true, because a submenu has a filter setup ready to adapt the signal conversion to your own requirements. It should be said that experimenting is definitely worthwhile here, although something like this can certainly be expected in this class. This, as well as the ability to adjust the output level, is by no means outstanding, but of course it is worth

mentioning as a fine feature. Likewise, that you can choose the background image of the display from various options.

Of course, the Metronome DSC is delivered with a matching infrared remote control, which leaves its very high-quality impression when you hold it in your hands, which we would also like to emphasize.

When it comes to streaming, one might think that an app should not be missing, but Metronome Technologie does not actually offer a separate app. Rather, it is deliberately left up to the user to choose the best app for him, thanks to UPnP the selection is downright gigantic. However, the manufacturer recommends an app specifically, the mConnect Control App from Conversdigital Co. Ltd., which is known as a versatile solution. This app is available for Apple iOS as well as Google Android.

The aforementioned streaming offers are also accessible via this app; this is expressly stated again at this point.
Perfection down to the last detail

If you take a sober look at the Metronome DSC, we have learned so far that it is a streaming client, a D / converter and a digital pre-stage. In this regard, the solution proves to be a rock-solid system, but in terms of the bare figures, nothing really stands out. The performance data given correspond to what one can expect from a streaming client these days.

So what is it that actually sets the Metronome DSC apart from many other solutions on the market?

Well, for this we have to refer again to our very detailed introduction and once again state that a streaming client is just a "computer" and its true level of quality is primarily determined by how you combine "IT" and "HiFi", especially if you do this in a single device.

A look under the hood

Nine screws need to be loosened to see what a proven digital specialist like Metronome Technologie is doing in order to achieve nothing less than perfection.

What is revealed to the viewer here is simply engineering at the highest level.

Remember when we said that performance is no longer a real problem? In fact, the real heart of the Metronome DSC is an ARM Cortex M4 32-bit RISC processor from STMicroelectronics NV, ultimately a small, separately executed circuit board that looks almost inconspicuous in view of what otherwise fills the inside of the device. Because while the housings are equipped with a manageable number of components in terms of functionality for similarly designed products, the elaborately populated circuit boards in the Metronome DSC occupy the entire housing.

Above all, three toroidal transformers stand out, which the developers use in conjunction with Schaffner filters and 14 independent voltage regulators to supply power to the various areas.

It is precisely this effort that is ultimately necessary to implement a solution at the very highest level, a system that, as promised by Metronome Technologie, does not make any compromises. A system in which every component is designed in such a way that faultless signal processing is guaranteed, completely free from interfering influences.

Incidentally, this also applies to the housing of the Metronome DSC, which consists of a robust frame made of stainless steel and a cladding made of solid aluminum plates. Sound-damaging interferences are not to be feared here in any way, apart from the fact that this leaves an impeccable visual impression.

The housing is enthroned on three aluminum cones, which of course require corresponding washers. The weight of at least 17 kg of the Metronome DSC would otherwise inevitably leave permanent marks on the furniture on which the device is placed.

Modern, elegant industrial design

The Metronome DSC measures the usual 430 mm in width, the depth is also 430 mm, so the system does take up a bit of space, but with a height of only 105 mm it ultimately appears surprisingly compact and above all very elegant .

It is characteristic that Metronome Technologie sees itself as an innovative, technology-driven company, yes, you have a somewhat sober approach at times, and this is also reflected in the design, as the Metronome DSC shows. You won't find elaborate flourishes here, everything looks clear and straight to the point and draws its timeless elegance from it. You can choose between a silver or anodized black version.

The sound...

As a hi-fi enthusiast, the result of this test is of course a detailed description of the sound that is provided by such a sophisticated structure that has been meticulously perfected down to the last detail.

The crucial point here, however, is that all of this effort is ultimately made to ensure that a solution such as the Metronome DSC plays as neutrally as possible, processing audio data like an unmistakable reference in such a way that it ultimately sounds exactly as it does in the studio recorded, mixed and mastered. Since this has long been done predominantly "digitally", you can't be more directly on the Studio Master than with a corresponding download or stream.

The great thing about the Metronome DSC is that it does not have a really distinctive sound character itself, but rather presents recordings in such a way that everything appears balanced, neutral and perfectly to the point. So there is no "warm sound character" to announce, nothing to report about "crystal clear, silky highs", and certainly no "voices that are brought to the curtain".

However, one must emphasize with all clarity the presence of the Metronome DSC with its impressive variety of details, its conciseness and precision. What dynamics, what richness of sound and an enormously remarkably wide soundstage is achieved by the fact that every nuance is reproduced perfectly.

At a time when superlatives are being used in an inflationary manner to describe banalities, one has to be very careful in principle, but in our humble assessment nothing other than the term perfection would be appropriate here.

Our conclusion

Streaming has long determined the market, the corresponding solutions thus extend over a wide price range, from very simple systems at very low prices to the premium class and the absolute reference.

In essence, they are all devoted to the same task, essentially they often have identical functionality and similar key data on paper, the real difference can only be seen when you take a closer look, and the Metronome DSC can act as a prime example here.

Metronome Technologie sees itself as a proven digital specialist, as a manufacturer who is committed to exceptional solutions. With the Metronome DSC, Jean Marie Clauzel's company will undoubtedly fully meet this requirement.

The fact that this is a system that is aimed at a comparatively small target group is clear from the price shown here. But anyone who opts for this system can be certain that they will not have to make any compromises. Rather, the Metronome DSC is nothing less than a reference.

Metronome technology actually provides the user with a plug & play system, a solution where you don't have to worry about the "how and why", you get a product that simply does its job and does all of the digital stuff Covers content at the very highest level.

Yes, in principle it is also about "IT", at least when it comes to pure streaming. The decisive factor, however, is how this IT component is integrated into the hi-fi environment, what effort is made to achieve nothing less than the best quality without any compromise. This effort, this expertise is simply breathtaking.

You don't have to resort to any esoteric descriptions to underline the special status, the exclusivity of this solution, rather the explanation is even very simple: high-quality technology, based on expertise and decades of experience, is used correctly, which leads to the goal.

We mean...

When Metronome Technologie speaks of a plug & play solution for the flagship of its metronome digital sharing range, the Metronome DSC, it means first and foremost the fact that, as a "three-in-one" device, it handles all aspects of digital processing Covers data in an elegant, easy-to-use form. And at a quality level that is second to none. Without a doubt, one can speak of an absolute reference here, a solution in which a remarkable effort is made to achieve a breathtaking performance with absolute precision, an enormous variety of details and unmistakable accuracy that can hardly be surpassed.

Manufacturer: [Metronomic technology](#)

Sales Austria: [Audio Exclusive GmbH](#)

Sales Germany: [HEAR GmbH](#)

Sales Switzerland: [Concierge Hi-Fi](#)

Price: € 24.990, -

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