

# Mola Mola Tambaqui

COMBINING IN-HOUSE CONVERSION WITH SWEEPING CASEWORK – AND A VERY ODD NAME – THIS DUTCH DAC CLAIMS TO OFFER ‘DIGITAL THAT’S AS GOOD AS ANALOGUE’. BUT IS THAT JUST FISHING FOR COMPLIMENTS?

**Let’s get the name out of the way first: Netherlands-based Mola Mola – that bit comes from a giant sunfish, weighing up to a tonne – has given all of its products to date piscatorial designations. These range from the Kaluga power amps, named after a species of sturgeon, to the Makua preamp, from the Hawaiian word for the same sunfish that gives the company its name. So if you happen to be buying one in Honolulu, you could have a preamp called the Sunfish Sunfish.**

Tambaqui, which is the moniker applied to the company’s £8999 standalone DAC, comes from an especially aggressive South American member of the piranha family. So why all the fish names? Company founder Bruno Putzeys explains that he originally wanted to call his products ‘Preamp’, ‘Power amp’ and so on, but his Japanese distributor was having none of it. Perhaps thinking of the Japanese fondness for all kinds of aquatic life, usually eaten raw, he turned to Wikipedia, but explains it took him two days to find suitable words – ‘You wouldn’t believe how prosaic most fish names are.’

You may have got the idea by now that Mola Mola does things its own way, a feeling reinforced by the swoopy casework of its products and their use of an illuminated sunfish – and when you delve a little deeper into the Tambaqui that proves to be very much the case: this is a long way from being an ‘off the shelf’ digital solution wrapped in nifty casework, as under the hood is an entirely in-house digital implementation.

Neither is the Tambaqui just a DAC, nor even just a DAC with a USB-Type B digital input to allow it to be connected directly to a computer: instead, has a network connection for set-up and control, complete with its own app, even if this isn’t actually a streaming device. Well, at least it isn’t until you take advantage of its Roon-ready status: connect it to a network on which Roon Core software is running, controlled by the Roon app on a tablet or phone, and you can play music directly to it from network storage or from Qobuz or Tidal, and even listen to Internet radio. In other words, while the Tambaqui doesn’t have a built-in streaming platform, it’s all too easy to make it stream, and it’s in this configuration that I carried out quite a bit of listening

Talking of not quite what it seems, the DAC also has an HDMI socket on the rear, but you can’t connect it directly to a TV: as on a growing number of DACs these days, that socket is used to carry an I<sup>2</sup>S

digital data connection from a suitable source, rather than anything conforming to the HDMI AV signal standard. There are also more conventional digital inputs on coaxial and optical sockets, and a balanced AES/EBU connection.

The analogue outputs are a little unusual, too: there are no unbalanced RCAs, but just a pair of balanced outputs, along with headphone outputs on a standard 6.3mm socket and a balanced four-pin XLR. So the Tambaqui can also be used as a headphone amplifier – though I have to say placing those sockets on the front of the units, rather than the rear, would be more convenient in that context, but more to the point those balanced analogue outputs can also be controlled by the internal ‘lossless digital volume control’, meaning that, in a simple system with purely digital sources, it can function as a preamp, perhaps with a pair of the company’s £5499 Kaluga power amps, which are based on Class D Ncore amplifier technology,



## HIFICRITIC AUDIO EXCELLENCE

### Specifications

Mola Mola Tambaqui

Type DAC/headphone amp/  
preamp

Price £8999

Inputs Coaxial, optical, AES/EBU,  
asynchronous USB Type B,  
I2S (via HDMI),  
Roon (via Ethernet)

Outputs Balanced XLR (fixed/  
variable), unbalanced  
and balanced headphones

File formats Up to 384kHz/32bit  
and DSD512 (via USB/Roon);  
up to 192kHz/24bit  
(other inputs)

Control via optional handset,  
Apple remote and/ or app

Dimensions (WxHxD)  
20x11x32cm

Weight 5.2kg 11.5lb

mola-mola.nl

UK distribution

www.sounddesigndistribution.

co.uk

unsurprisingly, given that Mola Mola founder Putzeys was central to the development of the Hypex Ncore amp design. By the way, he also went on to found Kii loudspeakers, which also use Ncore amps in their active design.

To use the Tambaqui straight into power amps, you can either use a couple of the front panel buttons for volume up/down (once you've set them up to do this), control it using the company's app (for Android or iOS), or add the metal-clad remote handset, which has the same 'life aquatic' organic styling as the DAC itself, but does cost an extra £499. However, given that the app is needed to set up the functions of the front panel buttons via a series of presets, including features such as switching between fixed line out and variable, setting maximum output level and the like, it would seem sensible to 'drive' the Tambaqui this way – especially if you're making use of its Roon implementation – unless you have a total app-aversion. By the way, two 12v trigger outputs are provided, should you wish to set them to turn on and off the power amps in concert with the DAC/pre.

That the Tambaqui has these added features is perfectly logical when you realised it's basically the DAC section available as an option for the £7749 Makua preamp. In that form it costs £4499 as a plug-in board, but the company realised there was a demand for this DAC stage in a standalone form.

The core digital technology here – using, of course, SHARC processors! – is described as a 'two board stack, in which all incoming data is upsampled to 3.125MHz/32-bit and converted to noise-shaped PWM on the first board, and then handled by two mono DACs on the second board'. This upsampling uses 7th-order noise shaping, giving a bandwidth up to 80kHz, each input rate has its own upsampling filter chain, and there are no standard DAC chips involved in the device. Instead, conversion is handled by 'a discrete 32-stage FIR DAC and a single-stage 4th order filtering I/V converter', the result being a claimed signal-to-noise ratio over 130dB. As Mola Mola points out, 'this is near the theoretical limit for 24-bit files and far beyond that of even quad-speed DSD!'

While the file formats the DAC can handle are of course limited when using the conventional inputs, which top out at 192kHz/24bit, with either the USB or Roon/Ethernet inputs it can work with content at up to 384kHz/32bit, and DSD up to DSD512, either in DoP or native form. The Tambaqui doesn't support MQA.

Whether used as a headphone amp, as a preamp or just as a DAC, fed from a Mac mini computer or via Ethernet using Roon, the Mola Mola DAC was never anything short of a total cracker. Simply, the sheer musical flow and vitality were spellbinding, as was the impressive of a total lack of artifice: there's nothing mechanical or 'technical' going on here, but rather just great performances pouring from the speakers, drawing the listener in and making the temptation to listen more all but irresistible.

The low end here is deep, tight and fast, but just as able to bring out the resonance of a plucked or bowed double bass, or the furthest reaches of the left-hand end of a keyboard, and this flows through an expressive, unforced and highly intelligible midband to a high frequencies both wide open and detailed and yet sweetly controlled.

Best of all, it does all this in a manner that more or less redefines the term 'seamless': just as you really don't listen the bass, midband and treble when you are sitting in a concert-hall or wherever enjoying live music, so it is here. The music is delivered complete and intact, allowing the listener to concentrate on a detail or enjoy the whole, again just as one might while attending a performance, and does it all with such ease as to make a lot of higher-end equipment sound not only artificial, but as if it is clearly having to work very hard to create that artifice into the bargain.

For the best results when using the Tambaqui as a line-out device or preamp, it's best to turn off the headphone outputs, but that's about the only bit of tweaking one ever need apply here. Other than that, it's just a matter of finding more music to enjoy.

## Tambaqui Second Opinion

from Martin Colloms

My well-used Tambaqui demonstrator had been running in for a few weeks before I got stuck in and was by then nicely refreshed. It was awarded its own place on the Frain rack, connected with a Naim PowerLine mains cable and – with the only audio outputs (aside from the headphone socket) offered in balanced mode – connected to my preamp via Chord Sarum T cables, which suited it very well. First impressions were that the Tambaqui was particularly easy on the ears, quite without false edge or aggression. Complementing this view, the soundstage was slightly distant, pleasantly so, seemingly aiding depth and perspective in the stereo image. While I have some level of mistrust for switch mode power supplies and high-oversampling DAC technology, the refined Mola Mola has largely overcome it, providing a vibrant soundstage full of fine detail, spaciousness and believable image layering. Orchestral sounds were natural, distortion imperceptible, and vocals communicative and expressive. With a powerful variable signal output built-in, it can feed a power amp directly and I found that it sounds at its most commanding in this mode.

Spatially, it has wide and deep stereo images, while the natural timbre helps maintain focus stability for complex orchestration. As you become familiar with its subtle sonic virtues a sense of envelopment seems to build which draws in the listener really well. Compared with much costlier references, dynamics are slightly softened, the pace is a touch slower, syncopation very mildly subdued, but all in all it is still very good on these aspects. Conversely, for timbre, detail and spatiality it's up with some of the best and scored a notional 200 on our open ended sound quality scale.

The headphone amplifier benefits from a short path internal link to the DAC eliminating the usual external interconnect cable employed from a headphone amp to a source. Here the standard was very high, and this facility is clearly no afterthought. It also sounds as if it offers very good headroom overall, an excellent dynamic range confirmed by the exceptional maximum output reaching studio levels, up to 18dBu or 6.2volts, for both line and the headphone outputs, just like a great preamp.