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## Web: www.metronome-technologie.com; www.absolutesounds.com

### **OUTBOARD USB DAC**



# Métronome Technologie C8+

France's contender for the high-end digital source crown is a DAC with an eye-watering price, a valve output option and the kind of sound that'll change your political stance Review: Ken Kessler Lab: Paul Miller

re we really still considering DACs with five-figure price tags, in an era when a £99 USB DAC sounds so good? Apparently so: France's Métronome Technologie, like Esoteric, Light Harmonic and others, addresses this cost-no-object sector with multiple converters, multi-chassis construction and other expensive solutions.

For the C8+, which comes in below the company's unfortunately-named, triangular-chassis Nausicaa [HFN Dec '13], £15,900 pays for two options over its lessexpensive C5 and C6 siblings. Most obvious is the addition of the Elektra outboard power supply. Two-box construction isolating power supplies from audio circuitry has been around for decades and needs little explanation: the isolation of the stages is inarguably wholly beneficial.

#### VALVE AND SOLID-STATE

The added cost comes from the physical requirements of a second enclosure and all the added hardware. But the C8+ has one other trick up its sleeve to differentiate it from the C5/C6, while support for higher sampling rates adds the '+' suffix to the normal C8 [but see PM's lab report, p45].

While the C5 is entirely solid-state and the C6 has a valve output stage, the C8 contains both and allows the user to select between either with the flick of a switch. The C8+ probably benefits more from the addition of the Elektra, which ups the ante considerably, placing the player in the rarefied strata of the devices from its aforementioned rivals - along with dCS, Theta, Meridian and too many others to name-check.

As with every product I've seen from Métronome, the construction is superlative, the components of the highest order. Unusually - especially when one sees the almost comedic bouillabaisse that is the

RIGHT: The C8+ is based around a pair of sophisticated 32-bit AK4490 DACs (resampled to 96kHz), features custom passive components and transformer-coupled balanced analogue output stages (solid-state and 6922 tube-based)

Nausicaa – this two-box player is minimalist to a degree that's almost, well, circa-1977 British. A total of four toggle switches on the two faceplates handle all your choices, while the back hosts four digital sources (AES/EBU, Toslink, coaxial and USB) and a choice of XLR balanced or RCA phono single-ended outputs.

Dimensions are 450x105x435mm each (whd) for the C8+ and the Elektra, so one thing you do have to accommodate with high-end DACs is girth. The two chassis connect through a 4-pin umbilical. Although this seems minimalist when compared even to certain headphone amplifier/DACs with wireless connectivity, the C8+ does at least offer USB-B so you can integrate a computer or server, while the remaining, conventional connection types cover pretty much everything...

unless you're one of those AT&T or BNC hold-outs. Although I'm reminded by PM that the C8+ currently resamples to 96kHz/24-bit, it does still handle source material up to 384kHz/32-bit, and the company uses construction techniques that will allow for firmware updates, so this should be future-proof.

#### CHOICES, CHOICES...

Feeding the C8+ with the T6 transport, I listened to a system consisting of Constellation's 300W/ch Centaur Stereo and the Inspiration One Preamp, driving Wilson Sabrinas [HFN Aug '15]. All wiring came from Transparent. CDs included commercial releases as well as some material burned to disc.

As this must be regarded as two-DACs-in-one because of the tube





and solid-state output options, everything had to be auditioned twice because the eventual outcome was not clear-cut. As much as I favoured the valves overall, the performance was programme-dependent, and I was fortunate enough to enlist the help of someone who performed A/B switching for me.

Looking at my notes, I found that 25% of the material I used sounded more natural with the solid-state output section in play. I hasten to add that there was no difference – valve versus transistor - when it came to commercial pressings or computer-burned discs.

Before addressing any conclusions, though, this did point out a caveat for those of you hankering after a Métronome DAC. If you audition the C8+ but can only afford a C5 or C6, the easy switching between the two will help you narrow down the choices. But I must repeat: enough recordings demonstrated an

affinity for one or the other, so you might end up craving a C8 or C8+ to have both options. The Métronome Nausicaa does everything the C8+ does, but in that wilder-looking chassis.

'There was just

the right level of

dryness without

actual aridity'

#### DAZZLINGLY CONVINCING

Age, maturity, resignation: whatever has been taking place in my psyche, I'm

> actually enjoying what the state-of-the-art in CD has to offer. While I prefer SACD (and that's a whole 'nuther game), I have to admit that the Métronome pairing proved to be dazzlingly convincing,

in the manner of good analogue. No, it doesn't fully replicate the intangible sense of warmth we attribute to vinyl, but nor does it drive one from the room. This is a thoroughbred sound, make no mistake.

Why I don't know, but I've been listening to a lot of 'tribute' albums lately, and one that has captivated me as much for the

**ABOVE:** Controls are utterly minimalist: on/ off and ground (earthing) on/off on the power supply, and source select and solid-state or tube on the DAC; display shows just what is necessary

sound as the content is the Stevie Wonder tribute, Conception [Motown MOTW 44006-73142]. Eric Clapton's 'Higher Ground' opens with whucka-whucka quitar somewhere inbetween 1970s funk à la Wonder's original and early Jeff Beck, demanding the kind of fluidity that many refuse to attribute to a digital source.

Via the Gallic player, a liquidity complements its sonic antithesis: ultracrisp percussion with aggressive 'thwack' and a dependence on transient attack for it to have all the necessary impact. The two coalesced into a rich whole, but one that allowed the listener to appreciate the individual talents of the sort of band Clapton often assembles, including the late Billy Preston and Macca's regular drummer Abe Laboriel Ir.

Coincidentally, the next track is 'Superstition', which Beck would record many times, including a version with Beck, Bogert & Appice. This is a perfect impression of Wonder's version by Glenn Lewis, again exhibiting attack to test one's woofers, with brass way in the background. The Métronome presented distinct layers of sound, extending all the way to the back of the room and beyond. The C8+ was revealing a talent for spatial grandeur independent of the output stage settings.

While the entire album is very 'studioish', as far from an unplugged sound as one could imagine, the solid-state versus valve issue was less pronounced than with a high-res transfer to an 'audiophile-grade' CD-R of Otis Redding's '(Sitting On The) Dock Of The Bay'. This was, of course, an →

#### **TUBES 'N DACS**

At the risk of being predictable, I favoured the Métronome's valve option: an early adopter of the California Audio Labs Tempest, I also used a Musical Fidelity KW-series DAC with valve output. What started out as a novelty 30 years ago when CAL's Neil Sinclair first suggested a 'tube CD player' soon became normal for those who loathed the format. It has to be taken in context: when CD first appeared, attacks against it were vehement, often vicious. Non-volatile brands like Meridian and Cambridge realised that digital wouldn't go away, and that separate DACs, outboard power supplies, better chipsets and other improvements would render CD palatable at worst and bloody sensational by the time it was too late, i.e. post-2005. Valves were an easy fix. Simplistic as it seems, changing the output stages of a DAC for a sweeter-sounding, be-tubed signal path ameliorated a lot of edginess. It may be euphonic colouration, it may be a 'trick', but I still ache for my late, lamented CAL Tempest II.



ABOVE: USB plus optical and coaxial S/PDIF and AES/EBU digital inputs with balanced (XLR) and single-ended (RCA) analogue outs. PSU connects via umbilical

all-analogue recording made back in 1967, and some might argue that the music thereby had an affinity for tubes. Whatever the cause, the tube output stage seemed less brash.

It was also a better test of the C8+ for revealing its way with bass of a non-synthetic sort. Naturally, there was the control, the tautness that one expects of, and even admires, in digital sources. Where the French converter demonstrated unexpected merit was in the extension, the roundness, the control and just the right level of dryness without downright aridity.

I have no idea how they applied the sounds of waves to that immortal recording, but the effect was so convincing, so evocative of the scene being created, that the song, so familiar as to be part of my psyche, revealed microscopic nuances I'd not noticed before. Textures in Al Jackson's drumming, the swell of the brass... how could something I'd heard – what? 500 times? – sound so genuinely fresh?

#### **IUST ONE BIG CARESS**

I needed a hit of mono, and it had to be something just as familiar as the Otis track. I wanted to determine if the Métronome was a new path to discovery, especially as I was not in the thrall of the valve/transistor conflict: after an hour or so, it was possible to be comfortable enough with the DAC to isolate the imprint of either.

Seriously: you can choose either to obsess about one or the other, or merely allow the option to settle into a matter of taste, curiosity, bias or anything else that guides you toward the toggle switch. I left it on the tube setting for convenience's sake as much as for sonic merit.

Yes, I dug out the Cardinals' 'The Door Is Still Open' and 'Shouldn't I Know' [Collectibles COL9977]. With mono, one isn't distracted by spatial concerns, imaging or other qualities that aren't so much about sonic accuracy and naturalness as they are about mere physical presentation. With everything dead centre, it's easier to focus on the sound rather than the effects.

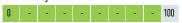
These recordings are all about vocals, even though the sax breaks are of the chills-up-the-spine variety. Harmonies, yes, but you can find their equal in The Hollies, The Beach Boys, The Ink Spots. No, it's the commanding lead vocals of Ernie Warren, which - while not as wideranging as Jackie Wilson's – possess qualities that are as disconcertingly angelic, majestic and expressive. The unaccompanied opening bar of 'Shouldn't I Know', immediately joined by the massed voices of the group, with a lone guitar and discreet percussion for the backing, ooze with a silkiness that a digital source could massacre.

Not so with the Métronome. It was one big caress, a musical shawl embracing the listener that was also manifested by 'The Door Is Still Open' – warm, consoling, as in tune with the lyrics as the delivery of any love song can be. The sound via C8+ is just gorgeous. (b)

#### **HI-FI NEWS VERDICT**

Nothing has dropped in price like separate, high-end DACs, so costly units like the Métronome C8+ are almost anachronistic. One has to ask: who spends this much on digitalia? There's a big 'however', though: the sound – especially via the valve output – is so 'analogue' to these ears that I can see how the well-heeled will look past budget gems from Oppo and Marantz and say, this is how digital should sound.

Sound Quality: 86%

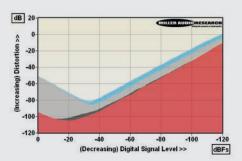


### LAB REPORT

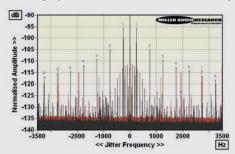
### **MÉTRONOME TECHNOLOGIE C8+**

It's not a given, but in the C8+'s case its solid-state (AOP) and tube output options really do result in 'two products in one box'. The AK4490-based digital heart is common to both, of course, and all modes share the same 96kHz re-sampling (even with 192kHz and DSD inputs) and 500-530psec jitter. The latter is lower via USB than S/PDIF in both AOP and tube modes [see Graph 2, below], the extra S/PDIF jitter visible as the unmarked black peaks. Beyond these technical features, the C8+'s performance is dominated by the analogue output stages. Both offer a high 5.07V maximum (balanced) output, facilitating easy A/B comparisons, but the tube mode has a far lower S/N (100dB vs. 114dB) and a far more influential output impedance (a massive 1.3kohm vs. just 200hm via AOP). So the tube output will be more sensitive to different types and length of interconnect and amplifier input impedance.

The 6922 triodes also bring extra colour with higher distortion. There's a slight difference in overall response – all modes have a –0.5dB/20Hz bass roll-off but the treble is fractionally 'flatter' in tube mode from –1.5dB to –1.3dB/20kHz and –5.4dB to –4.1dB/45kHz. Nevertheless, increased distortion and the poorer S/N marks out the tube option. At maximum output, the 0.002-0.02% THD in AOP mode compares with a higher but consistent 0.24-0.26% via the tubes (20Hz-20kHz) [see Graph 1, below]. The gulf is less obvious at the musically-important –30dBFs where THD is 0.0007-0.0008% (AOP) and 0.007-0.008% (tube). Readers may download full QC Suite reports for the Métronome C8+'s S/PDIF and USB performance (including tube mode) by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: THD vs. 24-bit/48kHz digital signal level over a 120dB dynamic range (red = 1kHz, S/PDIF; black = 1kHz, USB; grey = 1kHz, tube; blue = 20kHz, tube)



ABOVE: High res. jitter plot with 24-bit/48kHz data comparing S/PDIF (black) with USB (red, markers)

#### **HI-FI NEWS SPECIFICATIONS**

Max. output level /Imp. (Balanced)	5.07Vrms / 20ohm (1.3kohm tube)
A-wtd S/N ratio (S/PDIF / USB)	114.1dB / 114.0dB / 100.4dB (tube)
Distortion (1kHz, 0dBFs/-30dBFs)	0.0022% / 0.0008%
Dist. & Noise (20kHz, 0dBFs/–30dBFs)	0.018% / 0.0007%
Freq. resp. (20Hz-20kHz/45kHz)	+0.0 to -1.5dB/-5.4dB (-4.1dB tube)
Digital jitter (48kHz/96kHz / USB)	500psec / 310psec / 535psec
Resolution @ -100dB (S/PDIF / USB)	±0.2dB / ±0.1dB / ±0.6dB (tube)
Power consumption	31W (1W standby)
Dimensions (WHD) / Weight	450x105x435mm / 18kg (total)