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## CLASH OF THE TITANS!

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# Wilson Audio WAMM Master Chronosonic

by Alan Sircom

One of the most important attributes in a reviewer of anything is a spot of cognitive dissonance: you need to simultaneously be yourself and distance yourself. In the case of the Wilson Audio WAMM Master Chronosonic, that cognitive dissonance gets Grand Canyon wide. Here is a product that is at once the finest loudspeaker I have ever heard by no small margin, and a product that is worth roughly as much as everything I own. Currently, it would take me more than a decade of putting every single penny I earn into the kitty to buy a pair and I still wouldn't have anything like the space required to house them. Even using my magic powers, and casting the 'accomodatio discountiarumus' spell, I'd still be looking at a figure greater than my mortgage. And yet, there are people who both can afford the \$685,000 admission fee, and do so.

While a loudspeaker that costs more than many people's houses might seem like a bit of a reach on the 'significance' stakes, the story – and the back story – make this statement more justifiable.

Back in 1980, Dave Wilson's first loudspeaker sold to the public was the WAMM. It was first shown to the public in 1981 and immediately sold two pairs, despite its then eye-watering \$32,000 price. The WAMM continued on through several revisions for the next two and a bit decades, but was finally retired when faced with competition from within, in the shape of the Alexandria XLF. Despite the high price (it was closer to a quarter of a million dollars at its close), Wilson Audio did sell 53 pairs of the original WAMM. And the idea never went away.

If the WAMM was Dave Wilson's first loudspeaker as Wilson Audio, the WAMM Master Chronosonic is his swansong at the helm of the company, because earlier in the year Dave handed over the keys to the company to his son, Daryl. Dave Wilson has no intent of simply retiring, however; he is now the 'WAMMbassador', leaving his son to the simple tasks of designing loudspeakers, running the company, and the rest. In a way, the WAMM marks a true transition, as it's as much Daryl's first loudspeaker launched with him in the big chair (although technically, that's the Yvette), and so much of

the design work, testing, and listening have come down to Daryl Wilson.

The new Wilson WAMM Master Chronosonic might sound like a wristwatch, but the reality is those invented words are more than just there for show. 'Chronosonic' ('time and sound') expresses much about what is so (literally and figuratively) pivotal about the WAMM, as the mid-range and beyond is extraordinarily precisely time and phase aligned in the listening room, for the listener's precise position. This has been a constant theme in all Wilson Audio loudspeakers from the Sasha upward for some time, but the level of precision in these adjustments is taken to a new level in this multi-way, basketball-player tall loudspeaker system, and the results speak for themselves.

The drive unit line up reads more like a haul of loudspeakers. There are seven front-firing and two rear-firing drive units in each loudspeaker. Of these, the front and rear 25.4mm Version 5 Convergent Synergy soft-dome tweeter, and the front and rear 127mm pulp paper upper midrange units were designed specifically for the WAMM Master Chronosonic, while the 267mm and 318mm bass drivers were also designed for the WAMM Master Chronosonic, but the Alexx got them first. Only the pair of 178mm fabric lower midranges (used in seven other designs from the XLF onward) are not part of the WAMM design process. What's more, treble, upper midrange pair, and lower midrange pair are housed in adjustable pods in a micrometer-precise framework. And it's here where we get things wrong in audio. We glory in adjustable loudspeaker housings to help time-align the loudspeaker, but this seems slightly crazy if you think it through, because the slightest movement of your head relative to the time-aligned loudspeakers will throw everything out of balance. Instead, says Wilson through the medium of the WAMM Master Chronosonic, perhaps we should be looking at time alignment in terms of time *coherence*. This harks back to Wilson's original patents on time alignment back in 1984, but these concepts remained largely unrealised in domestic loudspeakers until the arrival of products like the Sasha, Alexia, and especially the Alexx. ▶



*“Most loudspeakers get their time coherence right to within about 100µS, the WAMM Master Chronosonic gets to an impressive 2µS.”*

► Our aural system is relatively insensitive to small changes in the time domain, and above 5kHz, our ears cannot detect timing-related issues less than about 10microseconds (µS). This is also one of those aspects of aural performance that does not decrease with age: our ears lose both high frequency performance and consistency with age, but our ability to determine time-delay errors is undimmed by maturity it seems. Given the speed of sound in air at around sea level, this relates to approximately 3.43mm. In other words, get the loudspeaker aligned so that the distance from speaker to ear and from ear to floor right with that kind of precision, and it will sound ‘time coherent’. Most loudspeakers get their time coherence right to within about 100µS, the WAMM Master Chronosonic gets to an impressive 2µS. Of course, this kind of precision requires two things; a loudspeaker capable of a significant amount of adjustment (and a rigid lock-down when adjustment is complete), and installers both trained and obsessive-compulsive enough to complete the installation process with a degree of absolute thoroughness.

The WAMM Master Chronosonic doesn’t just require a precise installation, it also requires careful selection and compensation for upstream electronics. Put simply, if you have 10µS sensitivity in-head, the loudspeaker is good for 100µS and the amplifier 50µS, the pinch-point is not the amplifier. But if the loudspeaker is capable of time-coherent precision down to 2µS, then the performance of the amplifier suddenly becomes a pinch-point. Wilson Audio has already started to analyse the ‘time profile’ of several amplifiers that might be used with the WAMM Master Chronosonic, with D’Agostino Momentum mono amps and the VTL Siegfried tube mono amps being the first candidates.

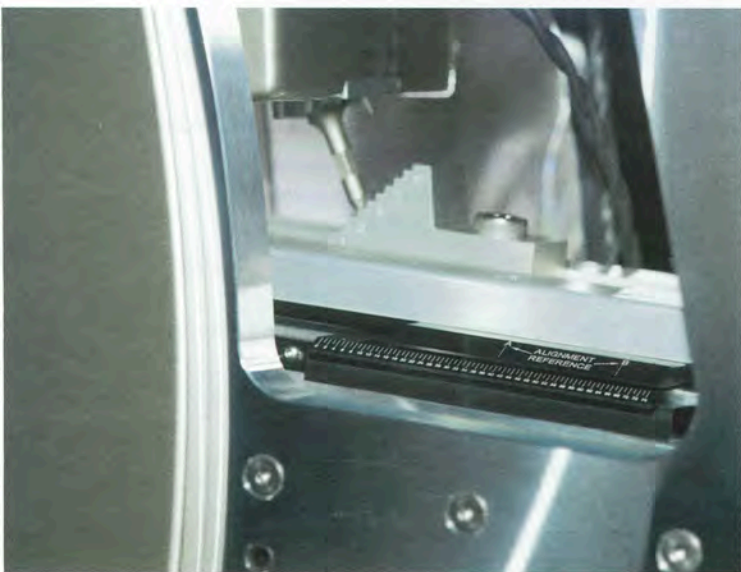
Installation is aided by the modularity of the loudspeaker. No-one has quite worked out just how heavy the WAMM Master Chronosonic really is yet, because they haven’t started shipping and the Design Proof pair in Dave Wilson’s listening room aren’t going near a set of scales any time soon. But the likely weight and packing requirements are on the ‘substantial’ side. Fortunately, both the modules and the side ‘ears’ that cover the framework they sit in, and that framework itself, are all removable and designed to lock into the bass unit. This bass unit is – in itself – fairly substantial and about the size of a mid-sized Japanese car engine, but has a relatively low centre

of gravity and makes placement easy. The modules are then built up from here.

When it comes to a loudspeaker of this magnitude, it doesn’t come to you: you go to it. I was one of a handful of journalists invited to travel to Provo for a one-to-one encounter with the WAMM Master Chronosonic in Dave Wilson’s fairly awesome listening room. The room is a bit of a known quantity among audio writers, as many of us have been there for the launch of one or more of Wilson’s designs, and the combination of the room size, it’s dynamics, and the equipment used to partner the loudspeakers is something of a benchmark in audio performance. Like the outstanding Steyning listening room of late Alistair Robertson-Aikman of SME (which sadly suffered a roof collapse a few years back, when a thick blanket of snow added even more load than the five tons of concrete used to build the sonically dead listening room ceiling). Practically every audio writer worth his or her salt has heard music in both listening spaces on more than one occasion and acclimatising yourself to Dave Wilson’s room is a relatively rapid process. What helps, of course, is it is a fine sounding room, too.

There is always a touch of green-eyed jealousy that emerges whenever you have to deal with expensive products. There is an assumption (again something that one has to overcome as a reviewer) that anything significantly beyond your personal limits is ‘overpriced’ and never bought by ‘true’ audiophiles. In philosophy terms, this is mix between a form of *Argumentum ad Lazarum* (affirming a conclusion because the person saying it is poor) and the ‘No True Scotsman’ fallacy: an attempt to protect a universal generalisation from counterexamples. In reality, just as few people buy a pair of £2,000 loudspeakers to show off to their friends with £1,000 loudspeakers – and instead tend to buy a pair of loudspeakers on the basis of how they sound – the same holds across the board. Someone buying a pair of WAMM Master Chronosonic is buying the best loudspeaker they know of, and have the advantage of having enough financial clout to be able to buy the best. Just as someone buying the best loudspeaker from another brand; they have chosen that design because it suits them best, they love what it does, and can afford to own it. In other words, they buy them to enjoy them, just like everyone who buys a pair of loudspeakers does. ►

*“The loudspeaker challenges all your perceptions of what you thought possible from an audio system.”*



► The difficulty we as reviewers face here (aside from reconciling listening to normal audio in the wake of a loudspeaker that costs \$685,000 per pair) is one of terminology. We simply don't have the words. That isn't just the superlatives; it's the basic terms. Our descriptive powers have inherent constraints (when we talk about the dynamic range of a system, there is an in-built assumption that the dynamic range is constrained compared to the original), and the WAMM has less of them than we've encountered before. A lot less. Making this more like the real thing than anyone who hasn't visited a very nice room in Provo, Utah has yet to experience from recorded music. I thought the terms would come in time, but they didn't.

The loudspeaker challenges all your perceptions of what you thought possible from an audio system; even those of us used to really high-grade audio and exceptional loudspeakers will find themselves wondering precisely how the WAMM is extracting that much musical information from even the most humble CD recordings. This isn't a subtle, nuanced difference. Music played through these loudspeakers just has that 'right' sound that is more like real music and less like there are electronics involved in the signal chain.

The time-coherence concept suggested by Wilson Audio is not part of the traditional audiophile zeitgeist, so it's likely to receive some degree of scepticism, but if this is one of the keys to why the WAMM Master Chronosonic sounds as it does, then it needs to be taken more seriously. There is certainly a complete absence of anything remotely like a temporal blurring, time-smear, or whatever you might want to call it. Normally too, at this point, there's a temptation for UK audio writers to go all jingoistic and point to small loudspeakers and Quad Electrostatics suggesting they crack the timing nut by being essentially point sources. But, on the face of the evidence presented by the WAMM Master Chronosonic, we don't have that luxury anymore. In the wake of listening to this loudspeaker, it's possible to listen to supposedly spot-on products like the Quad and point to where the timing isn't right. This is the audiophile equivalent of a hard reboot.

I have a couple of recordings designed specifically to tax ported loudspeakers, the most notable being 'Chameleon' by Trentemøller [*The Last Resort*, *Poker Flat*]. The fast, electronic bass notes effectively have nothing but attack and release and can 'choke up' a bass port, and the Wilson WAMM Master Chronosonic is the first ported speaker that doesn't!

*“Only the very best of the best of the best come close to the WAMM Master Chronosonic.”*

▶ This lack of port choking shouldn't happen, but it was one of the many things that shouldn't be happening with the Wilson Audio WAMM Master Chronosonic, and do. Given all of those different drive units, integration and coherence should be a bit of a concern, but instead this sounds like it's a giant panel loudspeaker. Granted it does all those things Wilson speakers are supposed to do well (outstanding soundstaging properties, effortless dynamics, high degrees of detail, and an ability to play extremely loud with ease), but it does them so well you find yourself listening to other excellent loudspeakers as if they are a little bit broken. Only the very best of the best of the best come close to the WAMM Master Chronosonic.

The problem, stated earlier, is we simply don't have the words for this. We're at the musical bleeding edge here, and discussions about the sound of the loudspeaker dissolve into discussions about the voice of the tenor, the skills of the guitarist, or the sophistication of the composer. And yes, we did do drum records and the audiophile thing, but they don't sound like drum records. They sound like drummers. And when those drummers are Kodo drummers, it's a cowering experience, one that audiophiles expecting the usual dynamic and impressive sound walk away from shaking. Dynamic and impressive? Of course. But this is more. This is visceral, real, challenging stuff.

Finally, I was asked several questions by audiophiles on the QT about the WAMM Master Chronosonic, and we all get it wrong. It's not bright, not dull, doesn't have a character, it is just music, red in tooth and claw, or subtle and delightful.

I'm normally on the loquacious side. Give me half a minute of dead air in a room and I'll fill it. I may not fill it with Shakespearean prose, but I will chatter and gossip and talk, and talk. Not this time. I was truly humbled in front of these masterpieces, and several months later, I'm still processing the experience.

Sadly, this isn't the kind of loudspeaker many of us will hear in the wild. They won't be at many shows, they won't be doing much of a dealer tour, and you probably need to be one of the handful who would be in the market for a loudspeaker of this magnitude to even experience one, unless you expend much of your Editor magic powers. But, if you can, you will have the same humbling musical experience.

This is as real as it gets! +

## TECHNICAL SPECIFICATIONS

**Type:** Modular four way ported floorstanding loudspeaker

**Front firing drivers:**

- 1× 25.4mm Convergent Synergy (Mk5) doped silk fabric dome tweeter
- 2× 127mm paper pulp composite cone upper midrange
- 2× 178mm doped paper pulp cone lower midrange
- 1× 267mm hard paper pulp cone woofer
- 1× 318mm hard paper pulp cone woofer

**Rear firing drivers:**

- 1× 25.4mm Convergent Synergy (Mk5) doped silk fabric dome tweeter
- 1× 127mm paper pulp composite cone midrange

**Enclosure Type:**

**Main Tweeter (Sealed):** X-Material

**100mm Main Mid Module (Bottom Vent):**

X-Material with S-Material Baffle

**177mm Main Mid Module (Bottom Vent):**

X-Material with S-Material Baffle

**Woofer (Cross Load Firing Port (XLF)):** X-Material

**Rear Firing Enclosure (Sealed):**

X-Material with S-Material Baffle

**Gantry:** Aerospace aluminium with W-Material Module Interface

**Nominal Impedance:** 3Ω

**Minimum Impedance:** 1.77Ω @ 310Hz

**Sensitivity:** 90dB @ 1W @ 1m @ 315Hz

**Frequency Response:** 20Hz-33kHz ±2dB

**Minimum Amplification Power Recommended:**

100 watts/channel

**Dimensions (HxWxD, w/o spikes):** 214x53x95cm

**Weight:** a lot!

**Limited to:** 70 pairs

**Price:** \$685,000 per pair (VAT not included)

**Manufactured by:** Wilson Audio

**URL:** [www.wilsonaudio.com](http://www.wilsonaudio.com)

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