

Serblin's Statement

FRANCO SERBLIN WAS 'MR SONUS FABER' FOR 25 YEARS. NOW HE'S INTRODUCED A NEW 'FLAGSHIP' LOUDSPEAKER UNDER HIS OWN NAME, AND MARTIN COLLOMS GOT TO TRY IT OUT

MARTIN COLLOMS

Since selling his interest in Sonus Faber some five years ago, Franco Serblin has been working with precious metals to develop a new silver palladium alloy for the Yter single strand speaker and signal cables (*HIFICRITIC Vol2 No2*), and also thinking long and hard about the design and construction of a 'statement' loudspeaker – perhaps not the largest, loudest or most powerful, but maybe for him the most musically satisfying.

Serblin has created many memorably musical and innovative loudspeakers, which were also objects of great craftsmanship and exceptional beauty, in the 30 years since he founded Sonus Faber. I particularly remember the *Extrema* which embraced the radical idea of a treble crossover without a capacitor, and also had an electromagnetically braked bass radiator with user tuneable low frequency alignment. Another wonder was the 1994 *Guarneri*, finished much like a Guarneri violin with a delightful, lute like tapered shape, since much copied by others. The impressive 2003 *Stradivarius*, with more than a passing echo of a bass viol, went against convention in adopting a wide front baffle to launch a purer midrange wavefront. Late on, his *Amati Homage* went into production after he had left Sonus Faber, and these design roots can be plainly seen in the latest *Amati Futura* (*HIFICRITIC Vol5 No2*).

Now operating under his own name, Serblin's brand new flagship model is called *Ktêma*, a Greek word that suggests that this will be a speaker "for all time", rather than merely a passing fancy. It might have a narrow footprint but its 1.1m height constitutes an imposing sight, and care is needed when moving them as they weigh over 55kg. The mixture of muted satin finish veneer and chromed alloy upper and lower structural plates generated mixed opinions; the gloss black version might look more 'techno' and complete in style. The narrow front ensures a very wide horizontal dispersion with a most uniform and natural sounding room drive. It could be said that the *Ktêma* represents a continuing development of the *Amati* theme, but there's much more to it than that, not least in the move to concave rather than convex sidewalls, and the concealed rear mounting of the two concealed 220mm alloy diaphragm bass drivers. The latter and their associated large ports fire through a pair of long vertical slots formed by a full height rear cover. The ports are located near the floor of an internally compartmentalised and braced enclosure.

The bass alignment is room-matched, while the pair of 100mm wide directivity paper cone midrange drivers are carefully phased to integrate well with the Scanspeak 2905 soft dome tweeter, a highly rated rear-chambered design by Ragnar Lian.

The cavity behind the midrange driver pair is vented to the sides by narrow, acoustically resistive slots in the enclosure sides. In theory this could add a degree of cardioid related forward directivity to the array at lower-mid frequencies, matching the natural diameter-related acoustic behaviour at higher frequencies. When the side slots were temporarily closed by rigid adhesive tape, piano sounded warmer and less naturally dynamic, and voices showed somewhat less spacious projection and sense of depth. The mid and treble drivers are fixed to a rigid alloy panel with diffraction control shaping.

Internal cabling is naturally Yter, and a pair of heavy duty WBT terminals (for spades or 4mm plugs) are fitted. At first my *Reference MM2* cable could not be connected without modification, so we began using the well made Supra all copper 4mm-to-spade adapters. However, results were felt to miss the target, so the cable terminations were modified to connect direct, and the performance improvement was far from trivial. I had worried for some time that the inclusion by cable makers and the use of such adapters was a potential problem, and here was an unambiguous result.

Sound Quality

Installation was not that straightforward, as the unusual enclosure geometry complicated the measurement of distances to room boundaries, the more so because the bass drivers are set behind the midrange units. Some mild mid bass excess around 70Hz was indicated, and this was controlled (though not entirely suppressed) by careful placement. I suspect the speaker was balanced for a taller room than mine (8.5 foot), as the floor-to-ceiling mode in a Victorian or Regency room would not reinforce this frequency to the same degree. However, the extended bass allowed good 25Hz levels to be achieved. The speakers may be directed inwards, the axes crossing just forward of the listener, but it was also successful when set straight ahead. The base and spikes were nicely rigid, achieving really firm coupling.

This physically imposing speaker is light on its feet with an agile and articulate midband, and an



The System

Digital sources: MSB *Platinum Signature* DAC, Naim *CDS3* and Naim *UnitiServe*. Analogue sources: Linn *LP12/KEEL/RADIKAL*, Koetsu *Urushi Vermilion*, Naim *SuperLine/SuperCap*. Pre-amps: Audio Research *Reference 5*, Townshend *Glastonbury*. Power amps: Krell *Evo402e*, Robert Koda *T-70*. Speaker cables: Transparent *Reference MM2* and Cardas *Golden Reference*

open, airy treble. It read programme quality with ease, and clearly revealed detail, subtlety and natural image depth with hi-res 24-bit/192kHz material. The better regular classical CDs were sometimes reproduced so well that they too might have been hi-res recordings. In fact it is so transparent and dynamic that it readily reveals the quality of different recordings. Image focus is tight thanks the small effective source width, and there is no trace of box sound in the midrange, perhaps due to the way those thin lyre-shaped apertures in the sides of the enclosure subtly vent the midrange chamber.

It plays louder and with deeper and more realistically percussive bass than you might expect from its size, and handles rock material well. But it is with natural recordings of natural instruments that one really appreciates the inner resolution and truth to life quality with which this design is imbued. It is not so much a balance or a coloration issue, more the ability to express the essences of musical performance: verve, loudness contrasts, tone colour variations and the necessary subtlety. When a full orchestra plays, one is aware of the innate character of every instrument and its sense of life and expressiveness, a rare achievement. This is a musician's speaker, in that it is faithful to that essential sense of performance. Nor does it choke on climaxes. In fact it can play exceptionally loudly and will drive large rooms well. Its timbre is slightly lean, cooler than usual but one readily adjusts to it, and I found the sound particularly unfatiguing, with no midrange ringing effects.

It worked really well with the Krell *EVO402e*, capable of a thunderous presentation when required, while the Robert Koda *K-70* power amp showed just how well the verve, grip and nuance of a fine orchestra could be reproduced: the emotional effect of natural pauses decaying into black silences from which the instrumental line was taken up again; the sensation of live sound brought forth from what previously had seemed to be mildly detached recordings.



It was just as happy with vinyl, delivering a still more sumptuous sound that seemed to extract all that the cartridge had traced. Despite that mild mid bass prominence, the fine detail and dynamics helped construct upbeat rhythm lines; it actually times quite well, and R&B material proved substantially involving. With inherently wide directivity, the sound was consistent across a wide listening zone, with an 'open' sounding character. (I did try the string grilles, and as ever liked their appearance but felt that they somewhat veiled the sound.)

Lab Report

This speaker not only missed its claimed 92.5dB sensitivity by a wide margin, measuring 87.5dB per '8ohm' watt, a shortfall of 5dB (a loss of 8dB per 4ohm watt), it is also an undeniably cruel amplifier load averaging 3.2ohms with minima of 2.6ohms, only slightly redeemed by the mild phase angle that means it is largely resistive in nature. Large, current capable amplifiers are required to get the most from this speaker. The vestigial output from the midrange cavity slits, measured in close nearfield, altered the output from 80Hz to 2kHz by about 1.5dB; it seem likely that the actual contribution will be virtually negligible at less than 0.5dB (but see listening test).

Rapping the rear cover resulted in a surprisingly

resonance, and I wondered at the effect of better damping or control here, or was it deliberate? The bass was none too even but admittedly, was hard to measure in the test circumstances. There was good extension to a low 22 Hz but with some emphasis of a few dB centred on 68Hz. The bass ports were clean of upper pipe mode resonances, these probably located beyond the natural cut-off of the bass system.

While there are trends, the overall frequency response met tight +/-2.5dB limits 27Hz - 21kHz, with a particularly smooth mid and treble. Driver integration is excellent, as shown by the off-axis responses which are almost flat to 10kHz even at 60degrees lateral, and are also exceptional in the vertical plane. The bass lift is evident, if you like scaled for larger higher ceilinged rooms while the room averaged response shows some room gain at low frequencies. However, the energy drive to the room is extremely good at higher frequencies, almost textbook from 150 Hz to 20kHz.

The waterfall decay responses provide good evidence for the subjective clarity and lively dynamic expression. They're nicely phase integrated and show excellently uniform decay rates over the frequency band, again with fine driver integration; you can hardly tell that several drivers are active here.

Conclusions

Certainly hard to drive and not capable of playing as loud as its specification suggests, it has nevertheless been a pleasure to hear a master designer at work through the entertaining and involving musical expression provided by the *Ktéma* flagship speaker. Effectively insulated from commercial pressures, Serblin was in no particular hurry to complete this design, and it could well have drifted on. But the production switch has been activated, and this delightful speaker is the result. The strong balance of experience and technology has resulted in an original design which delivers compelling musical experiences. I would not have it any other way.

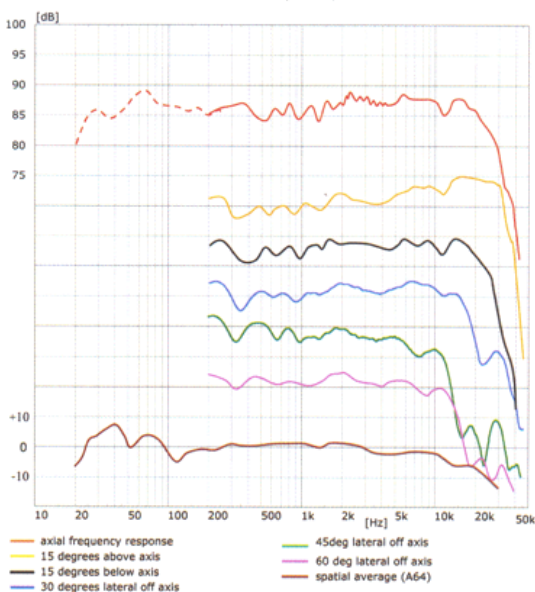
HIFICRITIC Loudspeaker Results

Make	Franco Serblin
Model	Ktéma
Price	£25,000/pair
Finishes	Satin sycamore or gloss black, with chromed aluminium top and bottom plates
Size (WxHxD), weight	42x111x47 cm, 55kg
Type	3-way, 5-driver, 25mm treble, 2x100mm mid, 2x220mm reflex loaded bass
Sensitivity for 2.83V	87.5dB measured
Amplifier loading	3.5ohms typical, 2.6ohm min: difficult
Frequency response, axial	27Hz to 21kHz +/-2.5 dB (listener axis): see text
Frequency Response, off axis	Very good power response, see graphs and room response
Bass Extension	27Hz for -6dB, in-room 22Hz
Max Loudness, in room	105dBA for a stereo pair
Power rating (Min, Max)	50W, 300W
Placement (floorstanding)	near free space location

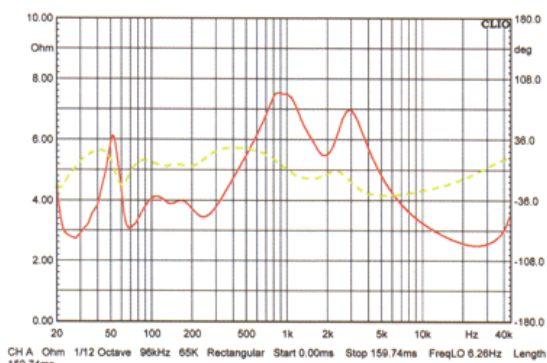


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Franco Serblin Ktéma Frequency Responses



Ktéma Impedance and Phase



Ktéma Waterfall Display of Energy Decay with Frequency

