

# HIFICRITIC



AUDIO REVIEW JOURNAL

Vol2/No1 JANUARY/FEBRUARY 2008 £8

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# Sonus Faber Cremona Elipsa

A FLOORSTANDING THREE-WAY DOESN'T HAVE TO LOOK BOXY AND BORING. MARTIN COLLOMS SCRUTINISED A NEW AND DECIDEDLY UNCONVENTIONAL SONUS FABER LOUDSPEAKER.

As well established Italian brand, Sonus Faber's designers are very conscious of Italy's musical and instrument making heritage, and some reflection of this may be seen in the style and faintly cello-like form of the *Cremona Elipsa*. I reviewed its bigger *Stradivarius Homage* brother some four years ago in *Hi-Fi News*, and found it an impressively musical and transparent 'flagship' model, suited to larger spaces and benefiting from a powerful amplifier with plenty of current capability. The *Strad* was designed by SF founder Franco Serblin, who is now taking an advisory role, while the new and less costly *Cremona* series (including this *Elipsa*) is the work of designer Paulo Tezzon, a disciple of Franco who works with both his group of engineers and invited audiophiles to help refine his creations.

About a third smaller than the *Strad*, the *Elipsa* has a remarkably similar profile, and because it belongs to the *Cremona* rather than the *Homage* series, with a satin rather than piano gloss lacquer finish, its £9,500/pair price is less than half that of the reference *Homage* model. SF's hallmark tensioned vertical cord grille is included, setting off the visual design very well, and I found the loudspeaker fitted very attractively into a room setting.

The design is tightly specified, and the claimed figures were largely verified. Sensitivity is a high 91 dB, amplifier

loading 4 ohms, and the quoted power range 50-250W. The speakers are 125cm high and 55cm wide but just 35cm deep (increasing to 45.5cm with the base struts installed), and weigh a substantial 50kg. The improbably slim shape and elegant curves disguise sufficient volume to tune the 260mm chassis (10 inch) bass driver via two large (75mm diameter) rear-mounted reflex ports, which will be capable of considerable power before distortion becomes audible. The driver has a pure piston magnesium-aluminium alloy cone, a very high power motor, and an open centre pole to aid cooling.

The vertical-in-line disposition of the three drive units places the tweeter at the top, and in this instance it's unusual in being loaded by a wide expanse of smoothly curving cabinet 'baffle'. The effect of this will be to reduce diffraction effects close to zero, which should help create a smooth, natural treble. Narrow-fronted enclosures suffer an inevitable degree of diffraction, where adjacent enclosure edges result in secondary phantom tweeter output sources, a type of reflection which disturbs the main output. Both the frequency response and the decay characteristics are often impaired. (Some designers fit felt absorbers around the treble and mid drivers to suppress the off-axis radiation which excites the diffraction sources.) The cast chassis tweeter is a superior grade of the 38 mm Scan 'ring' radiator (which SF calls a 25mm type), a non break-up, rolling action fabric diaphragm device used in a number of SF designs.

The flush-mounted 150mm chassis midrange driver also has a low diffraction platform. It's a custom designed Scan unit with a lightweight wood fibre cone, inverted centre cap, open style cast metal chassis, and an eddy current cancelling motor design.

The cabinet, subdivided into a large bass and smaller mid enclosures, is skilfully built into an elliptical profile, bonding 20 hollow composite and solid maple sections with further internal bracing ribs. The system is designed with special feet and enamelled steel struts to tilt the speaker backwards and provide the correct angle for listeners. A single pair of high quality terminals accommodate 4mm or spade equipped cables, and hardware is provided for both carpeted and solid wood or tiled floors.

*"The vertical-in-line disposition of the three drive units places the tweeter at the top, and in this instance it's unusual in being loaded by a wide expanse of smoothly curving cabinet 'baffle'"*



MARTIN COLLOMS

Nominal crossover points are at 250Hz and 2.3kHz, but with broad overlaps The reflex loaded midrange driver, for example, is still operating in 'overlap mode' down to 100 Hz. It is said to have 'optimised space and time performance', something we have seen claimed before but which is not always verifiable.

Locating this speaker requires thought and experiment, since it does not drive the room like other speakers. The broad front and sweet, near viceless tonality tends to voice the room acoustic less than expected in the upper range, and it can then sound dry and closed in. In a very big space they can be operated straight ahead, and the big soundstage that is developed is reminiscent of the concert hall, but you need to be 4m plus away in a very large room and with at least 2m spacing from each enclosure to the nearest walls. If not, side wall reflections will impair the image precision and tonal balance.

For normal size rooms, experience suggests that best results will probably be achieved by directing the speaker inwards quite strongly, even so that the axes cross a little in front of the listener. The perceived wavefront then appears more familiar, and good stereo focus, stage width and depth may be achieved, albeit on a smaller scale. One price that is paid for the low diffraction of this curvy, broad-fronted design, compared to the more conventional narrow front of designs like SF's *Amati Homage*, is a mildly duller reverberant acoustic. The zone for good stereo imaging may also be somewhat narrower.

#### Sound Quality

A number of amplifiers drove the *Elipsa* well. I mostly used a Conrad johnson 350SA, with ACT2-2, and Audio Research *Reference 3* pre-amps. Transparent *Reference XL* and Kimber *KS 3035* hybrid silver/copper speaker cables both proved very effective. While a loan Ayre *AX7e* amplifier did not prove a good match with my Avalon speakers, delivering a harder and more forward midband than I prefer, the sweet, even laid-back midband of the *Elipsa* provided a surprisingly good tonal match with the Ayre.

Beyond the general recommendation for open space siting, this loudspeaker's powerful rich bass could be significantly too heavy in smaller rooms. This is really a speaker for large spaces – 'open plan' rooms, loft apartment types, or perhaps classical high ceiling rooms. In my view it's not suited to smaller 'closed space' rooms, especially those built in masonry.

This big three-way loudspeaker was enjoyable from the beginning and, as John Atkinson noted in his report for *Stereophile*, this *Elipsa* has a lovely dynamic range, and a



power to thrill that's simply not possible with compacts, no matter how clever, refined or admirable.

Symphonic material was spectacular, with every player well balanced, accorded believable focus and perspective, and with timbres which reached closer than usual to the sound of the live instruments. The concert hall acoustic was nicely present, as was a good sense of weight and scale. Though some mild coloration is audible, none is offensive or fatiguing, and the mid-to-treble has a balance and seamlessness reminiscent of Quad's electrostatic.

This speaker is very easy on the ears, sounding more like a caress than the chromium-plated blitz one sometimes encounters. Its dynamic range approaches the amazing reach of the *Strad*, not missing a beat over the whole bandwidth, and eminently useable from 25 Hz. Piano is slightly boxy, but still very believable, and different makes were easily differentiated. The mid-to-treble is even sweeter than the beautifully blended Wilson 8 – perhaps a little too much so – but the result is notably kind to more difficult audio components and program material.

Detail recovery verges on the very good. Although it doesn't sound as transparent as the latest *Amati Homage*, the Wilson 8 or the *Strad* (all much more expensive) it still merits a 'good plus' rating. One does become accustomed to the reduced room reflected content, and when reverting to a narrower front, wider directivity design, the room is then illuminated afresh. Examining a few details in close up, the treble is close to the world's best for smoothness, detail, and integration to the midband. The latter is slightly coloured, with a hint of cone sound, but it is also crisp, fast and dynamic, revealing a wealth of unexaggerated detail. Low frequencies run a little behind. They're a bit heavy and a

trifle slower, with some upper bass emphasis, but I know the speaker has fine underlying quality, and that the final result will depend on room interaction. It was capable of impressive percussive punch and played tunes well. While it rocked quite well, I feel its heart lies with classical material of all kinds, including difficult operatic vocals. And if the bass is well matched to the room, the tempo will pick up substantially.

#### Lab Report

Sensitivity is a high 91dB/W, but this is combined with a typical 2.5 to 10 ohm impedance. I do wish that designers would give up this quest for high sensitivity at the expense of sensible amplifier matching. With that 2.5 ohm minimum in the upper bass and 3.5 to 4 ohm rating in the mid and treble (taking into account a fairly mild phase angle), I'd rate this at 4 ohms overall. The port tuning is at a low 32Hz, promising in-room bass to about 27 Hz.

The low frequency Q is quite high, and as the listening tests indicated, the mid-bass is rather generous and clearly best suited to larger spaces, much as the instruction manual suggests. In case of difficulty, 25mm thick porous open-cell foam plug(s) in the rear bass port(s) can help dry the bass a little. However, put one in the midrange driver's port and the sound becomes shut-in and less dynamic: fascinating.

The preferred (inwardly directed and up-tilted) axis frequency response is very fine, and with no smoothing meets close +/-3dB limits from 35Hz to 20 kHz, with some attenuated extension to 40 kHz (-8dB). The intrinsic axial response is even better, probably +/-2dB 150Hz to 20 kHz. There is about 3dB of mid-bass lift.

The above axis trace (orange) shows a mild dip in the 3kHz crossover region, where it would not be heard, while below the main axis (black) it is very smooth, as intended, though now sufficiently off-axis of the tweeter for the rather directional output beyond 20 kHz to become evident. Off-axis laterally, even at a wide 60 degrees (purple), output is smooth and well integrated, revealing sophisticated driver output blending. In my particular room the room-averaged response shows an audible +6db bass lift around 40Hz, alongside good extension to a low 25Hz. A very mild characteristic lift is centred on 1kHz, but the overall power integration is very smooth and accomplished.

Despite some unavoidable in-room artefacts on the graph, the waterfall display for energy decay is remarkably good in respect of the linear phase response at the back of the graph, and the rapid clearing to lower amplitudes, which indicate good transient response and clarity. The



design claim to good time integration would seem to have been met. Clearly the recommended angle and tilt for this speaker is specifically designed to deliver good time alignment for the mid-to-treble array.

Pair matching was excellent, better than  $\pm 0.75\text{dB}$  in third-octave mode over the vital central band. The grille does attenuate the high treble a couple of dB in places, and introduces some ripple; it may be removed for critical listening. The high sensitivity and high quality motor delivers low distortion, and spot checks showed very good power handling and distortion typically at 0.2% and below for frequencies above 100Hz. As we have seen before (in the *Stradivarius* and Krell's *Resolution One*), this 260mm SEAS bass unit is particularly capable. A 300W amplifier programme rating is appropriate (with the usual caution, for undistorted speech and music), and a medium sized room may be driven on music to about 110dB for a stereo pair, a wholly realistic sound level. Minimum power may be as low as 25W if really high sound levels are not required. The impedance may produce some alteration of the bass output with valve amplifiers, so do take dealer advice on matching.

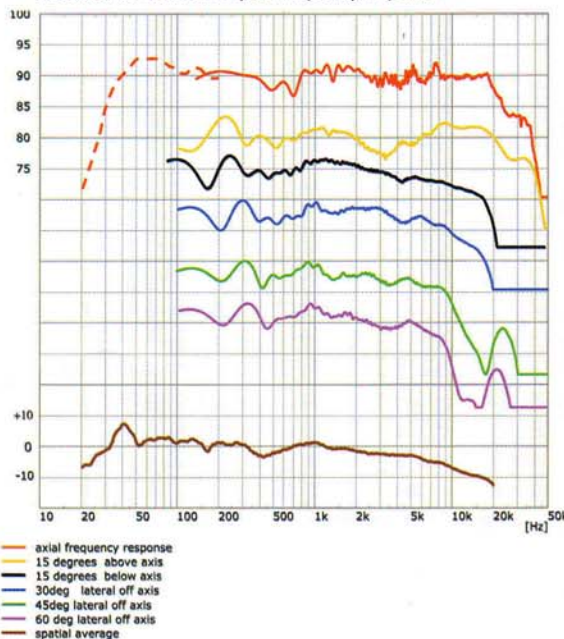
**Conclusions**

This is not an easy loudspeaker to summarise. It is clearly designed primarily to sound highly musical rather than meeting some laboratory standard for low colouration and tonal accuracy. If judged by the highest standards there is a mild shortfall in absolute transparency and micro detail, and comparison with the *Stradivarius* would show this immediately. It also has too much bass for smaller, enclosed rooms. Yet the speaker is nonetheless very satisfying as is: the complete sound is pure, essentially seamless and very well integrated, with deep bass, very good dynamic expression, generous scale and massive dynamic range.

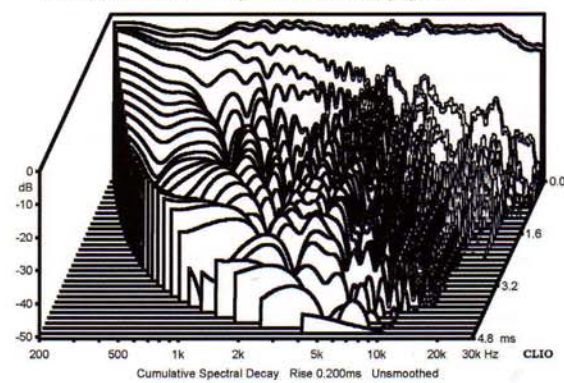
Certainly one of the great designs, acceptable amplifier loading and high sensitivity will render it usable with a fair range of amplifiers. Build and finish are superb throughout, and it even works pretty well with the corded grilles in place, looking altogether more sculptural than a loudspeaker box. Bear in mind that to get a good bass balance it's best suited to large open spaces: in such locations it clearly offers superior value for money, competing well with larger and much more costly designs. You could say that the *Elipsa* sounds more analogue than digital, and that is a fine compliment indeed.

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Sonus Faber Cremona Elipsa: Frequency response



Sonus Faber Cremona Elipsa: Waterfall decay spectrum



Sonus Faber Cremona Elipsa: Impedance and phase of impedance

