

Fyne Audio F703SP: more is more

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Fyne Audio F703SP loudspeakers

Surface area equals pi times the square of the radius is one of the equations that imposes immutable constraints on passive loudspeakers. Forgive the maths refresher, but the size of the driver or drivers has an effect on the lowest bass notes a speaker can produce, together with other parameters the designer chooses.

Active speakers with DSP operate with somewhat different rules, but in the world of passive speakers, tiny drivers just don't cut it. If we have small speakers then the sonic territory below 40Hz will be a mystery to us. Full-range passive speakers, which we might define as those being capable of reproducing the 27Hz fundamental of the lowest note of a grand piano, or the lower pedal notes of a pipe organ, have woofer surface area. And plenty of it.

If we are in the market for a pair of full-range floorstanders and have a shortlist of contending speakers, it can be instructive to work out the surface area of the woofer or woofers on each of them. It can tell us something useful about the likely performance of each of them in our listening room.

Of course, we need to remember that cabinet volume and the driver loading method matter too. A transmission line design with the same size woofer might be expected to dig deeper than a ported design, for example.

Appearances can be deceptive. We might think that a speaker with two 6.5-inch woofers offers a larger surface area and thereby superior bass extension to a speaker with a single 10-inch driver. After all, two times 6.5 equals 13, right? However, if we do the maths we find that the pair have a combined surface area of 66 square inches whereas the single 10-inch driver has 78.6 inches. We might also imagine that going from 10 inches to 12 inches makes not that much difference, but again the maths tells us we are wrong. It adds a whopping 34 square inches, taking the surface area to 113 square inches.

All of which is by way of introduction to Fyne Audio's latest speaker, the floorstanding F703SP; the special performance version of the established regular F703. For an RRP of £15,000, it has a single 10-inch woofer, and it competes in a sector of the market where many of its competitors have multiple, smaller drivers. Fyne Audio has reasons to believe that Things Should Be Done This Way. Some of them are to do with commercial positioning – unusual stands-out in a crowded field – but there are technical arguments at play here too. And then there's real-world listening which we might or might not think supports the technical assertions. Fyne Audio already offered more than 30 different speakers – an almost bewildering range from one company – and that was before the launch in February of this year of the F703SP and its



smaller F702SP sibling. The two sit just beneath the company's flagship F1 Series and while they share drivers, crossovers and a few other features with the premium range, they don't share its looks, which some might venture is a good thing. While the F1s might be characterised as 'visually challenging' – think Cyclops with a walnut finish – the F702 and '03 SP models are more conventionally styled; tall, slim-ish columns with a rather fetching curve to the side panels as they bend in to meet a back panel that is much narrower than the baffle at the front. The top surface also curves down towards the rear, contributing to a stiff and relatively inert enclosure which works to avoid internal standing waves.

The plinth of the F703SPs is a double-deck affair, similar to that of the regular F703, but formed of thicker aluminium. The three drivers (the speaker is officially a two-and-a-half-way design) are mounted on the baffle, the horn-loaded compression driver tweeter is concentric with the 10-inch bass/ midrange. Beneath them is an additional 10-inch woofer. The woofers are loaded by two tuned chambers and its rear output fires downwards onto an upward-facing tractrix cone on the bottom level of the plinth so that some bass energy is distributed through 360 degrees at floor level. It's an arrangement unique to Fyne Audio and helps a speaker that despite being on the large side isn't as fussy about room placement as some other designs.

Just before the Bristol hi-fi show earlier this year, I spent three weeks with the F703SPs' smaller sibling, the F702SPs, and was impressed by its combination of refinement and dynamic get-up-and-go. In many respects, the F703SP is simply a larger version of the smaller speaker, the obvious primary differences being the larger drivers and 22 litres of extra cabinet volume (99 Vs 77). The F703SP is marginally even more efficient than the F702SP – 94dB vs 92dB – and rather than using a ferrite magnet in a 25mm magnesium domed tweeter it has a 75mm titanium dome with a neodymium magnet.

Fit and finish on both the SP models is exemplary, as we should expect for the respective retail prices. The review sample F703SPs were in a piano gloss walnut, perhaps less on-trend than the also-available piano black, but actually a lot more practical since it tends not to show the fine scratches that always seem to end up marring a gloss black finish. Around the back there are two pairs of binding posts plus a screw-down ground connection.



Sound quality

Connected to Quiescent T100MPA monoblock power amplifiers (130 Watts per channel, 8 Ohms), the F703SPs proved to be an engaging, informative and properly entertaining listen. I've now heard six of the larger models designed by Fyne Audio's Dr Paul Mills since the company was established in 2017, and all of them exhibited sonic evidence of the same DNA; they have a particular dynamically expressive quality that listeners who regularly calibrate their hearing by attending recitals will recognise as a key part of the live experience.

How does Dr Mills pull this off? I refer back to our maths refresher at the start of this review. In part it is possible because of the driver surface area the F703SPs have to play with. Mills favours larger drivers because (who knew!) they move more air with less cone excursion than smaller drivers do, and less excursion means less distortion. They are more efficient too, which results in less thermal compression and an easier load on the amplification. The potential downsides are that if pushed to high frequencies large driver cones can suffer from break-up modes and become directional.

To avoid this undesirable behaviour, Mills arranges his high crossover point in the F703SP at 850 Hz, a notably low frequency. He can do this because of the ultra-wide bandwidth of the 75mm compression-driver tweeter. Unusually for much of the industry the drivers in his speakers are not versions of off-the-peg products from specialist makers, but are wholly designed in-house. That means that rather than having to work with driver parameters chosen by a third party, Mills has complete control over every key aspect of the speaker development process to the point where any voicing or linearity errors are his and his alone. We might therefore expect the F703SP to be a strong performer – and it is.

Fyne Audio claims the in-room -6dB frequency response is 24Hz to 26kHz. In my 4x6m listening room the review samples did indeed deliver bass deep into the lower octaves that compressed the air to a most satisfying degree. Attentive readers will have noted that the bass is handled by a second 10-inch driver going up to 250Hz and understand that this is rather uncommon in a field where competitors might employ a 3-inch doped dome or 6.5-inch dynamic driver to handle the mids. As the F703SPs' 10-inch woofer moves a lot of air, so too does the midrange, with the result that the generous dynamic expression is not confined to the lower octaves, but underpins sonic quality through the presence region and beyond, even at moderate volume settings. There's nothing pumped-up about this; it sounds natural and unforced, almost as if the speakers are not having to try too hard to energise the room and, in the process, getting near to the ragged edge.

The concentric tweeter and bass/ midrange in the F703SPs act as a wide-dispersion point source that spans from the lowest frequencies to 24kHz and results in imaging of an extremely high quality. Well-recorded material is presented with a particularly deep and wide soundstage in which musical events are located with an arresting precision and solidity. Mills has employed

Fyne Audio F703SP

a cryogenically treated crossover using premium components, and the handover between drivers is subjectively seamless.

I did wonder whether expectation bias resulting from an understanding of the technical decisions taken by Mills would play any part in the appreciation of what I was hearing. As a design, the F703SPs are not run-of-the-mill, but on first listening – energy delivery aside – they don't stand out as particularly different to any number of competent alternatives. There's nothing to frighten the horses. So far, so conventional.



It is only on extended, more studied listening, that the quality of the sound staging, the rightness of that generous dynamic expression and the natural unforced delivery begin to assert themselves. Once these qualities are noticed, it's hard to listen to quite a lot of other designs without feeling a little deprived. The F703s don't push detail at the listener in the overly-forensic and ultimately rather wearing manner of some alternatives, but present tone, texture and dynamic changes in what feels like a natural and relaxed way.

I want to use the term loose-limbed, but in doing so I worry that some readers might infer that the delivery is lazy and rather undisciplined. It is not. Mills' drivers deliver plenty of transient snap and control, but underpinned by the strong dynamic expression they somehow make us feel that there is more time to appreciate what we are hearing. It is a quality that some like to call 'wetness', using that word to describe a presentation that contrasts quite strongly with that of a lot of alternative speakers whose smaller, large-excursion drivers can sound rather dry, matter-of-fact and unengaging.

Conclusion

If that reads as though I have a preference for larger speakers like the F703SPs that's because I do. There are practical reasons why we might opt for any number of more compact designs with necessarily smaller drivers, but if budget and location allow there's really no substitute for well-designed driver surface area and cabinet volume. As already noted, active speakers play by different rules.

Buying a pair of F703SPs at RRP will not leave any change from £15,000, but if we consider the alternatives around that price point the Fyne Audio speakers represent particularly strong sonic value. As a short-list contender they are a must. Just a word of warning: you'll probably end up keeping them.