

Brodmann Acoustics

F2 loudspeakers

by Steve Dickinson

When you go to a live concert, where do you sit? Are you a stalwart occupant of the first five rows, keen to hear everything the conductor hears, including the rustling as he turns the score? Or do you sit a little further back, maybe the next ten rows or so, preferring to let the venue make more of a contribution, perhaps? Your answer to this question may give a clue as to whether the Brodmann F2 loudspeakers are for you.

The Brodmann name is well known in certain Viennese circles; the good Mr. Brodmann started making pianos in Vienna over 200 years ago, passing the baton to his protégé, a Mr. Bösendorfer, in 1828. Over the years, the Bösendorfer name became extremely famous for piano making, but the Brodmann name never completely went away. Several years ago Bösendorfer developed a range of high-end loudspeakers, but when Bösendorfer was taken over by Yamaha, the loudspeaker range was handed over to Brodmann, which still makes a range of well-regarded pianos.

The F2 sits at the top of the junior range of Brodmann loudspeakers, the Festival series, which comprises one wall-mount, one standmount, and two floorstanding models. The more expensive VC (Vienna Classic) models are all floorstanders. The F2 is an elegantly proportioned, moderately tall, and fairly slender floorstander finished, as you might expect, in impeccable piano black. For the Festival series, Brodmann has helped keep prices manageable by adopting Henry Ford's colour palette, whereas other finishes are also available for the VC series. I do enjoy a nice piano black finish, particularly one as well executed as this one (unsurprisingly proving that piano makers know how to make a good piano finish), so this was absolutely no hardship at all.

The thing that struck me about Brodmann loudspeakers when I first heard them was the way in which even the small standmounts filled a moderate sized room with music. There was something about the way the musical energy found its way into the room, which felt quite natural and unforced. Thus, a small box, without obvious strain or effort, could drive a largish room to quite respectable levels. This is something of a Holy Grail among loudspeaker builders. The reason for this appears to be a feature of the unusual 'sound-board' design adopted in all Brodmann designs, in one form or another. Certainly, the Brodmanns' room-filling abilities extend beyond what might be expected for the size of the cabinets.

Brodmann does draw on some musical instrument design principles, most obviously the fact that its loudspeaker cabinets are entirely devoid of damping materials. Like the sound boxes of many instruments, the loudspeakers rely on bracing for rigidity, and careful design to produce a cabinet whose

contributions are minimal and largely benign. Not having to work against damping is said to help the driver to more accurately follow the signal, and unwanted resonances are minimised by careful driver design.

The second interesting feature is Brodmann's 'sound-board' bass management. Rather than a port or a transmission line, bass output is controlled by a slot in the cabinet, which creates what Brodmann refers to as a 'horn resonator', an invention of the loudspeakers' designer, Hans Deutsch. The mass of air in the cabinet is driven by the output of the sideways-firing bass/mid driver (hence the lack of damping), and this energy exits the cabinet via a carefully dimensioned slot created by the gap between the cabinet proper and the 'sound-board'. In the VC series, this slot stands off from the cabinet sides, but in the F2 it utilises the speaker's baseplate.

Imagine listening to music from outside the listening room, with the door half open. As the door is progressively closed, the upper frequencies are attenuated until all that exits the room is the bass. The slot created by a slightly open door acts as a low-pass filter, and the frequency response is dependent on the width of the slot. This is the working principle behind Hans Deutsch's horn resonator. The slot, acting as the low pass filter, rolls off linearly from 130Hz at 4.5 dB/octave, rather than the more familiar bass reflex port augmenting the bass at a tuned frequency. This makes for a more even and linear bass response and drives even large rooms with little apparent strain or effort. The sideways-firing bass/mids also fire directly into the room, via a slatted grille panel on the

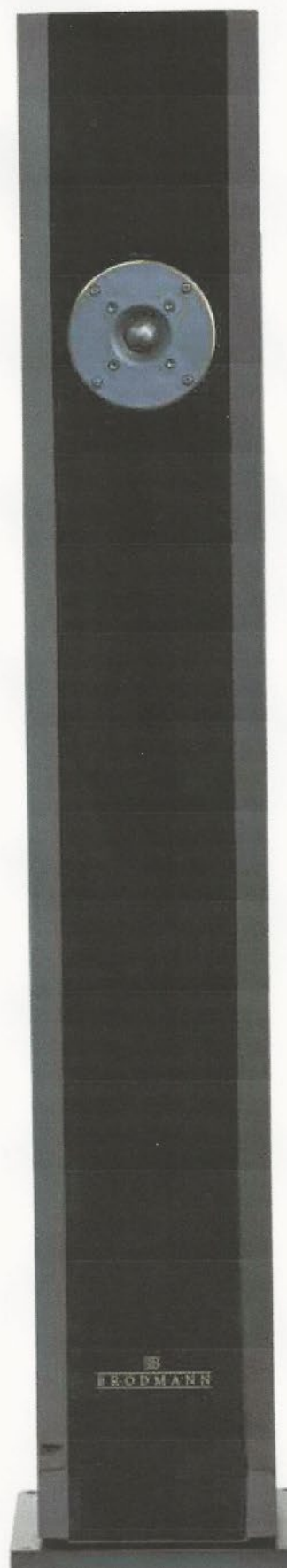
cabinet sides. The only forward-firing drive unit, indeed the only visible drive unit, is Brodmann's own silk dome tweeter.

It all seems to work; the sound floods out of the Brodmann F2 with a sense of ease and naturalness, which makes some comparable conventional loudspeakers sound distinctly unsubtle. Rarely have I heard sideways-facing drivers give a truly satisfying result, probably because in many applications they are mainly a way to get a quart-sized driver into a pint-sized cabinet. Here though, as part of the design principle, the application is considerably more coherent and successful. Image focus was gratifyingly tight and stable, with solo performers occupying a definite space front and centre, well clear of the boxes. Here, careful placement is key, and amply rewards a little time and effort spent in the setup. It yields an even and well-proportioned output, with good imaging and spacious soundstage, which isn't tethered to the cabinets.

The Brodmanns do like a bit of elbow room, and my modest-sized 4x3m listening room was probably as small as you'd want to try to use them in. Bass is indeed solid and convincing; Seal's 'Killer' [Seal, ZTT] has real impact and drive. Despite their classical (in so many senses of the word) heritage, Brodmanns aren't too polite to boogie – so don't make the mistake of assuming these are loudspeakers mainly for classical music. I got excellent results with jazz and rock. The F2 loudspeakers will play loud, with excellent dynamics, spaciousness, and 'air', without that 'one too many cups of coffee' sense of trying that bit too hard to impress. They impress, sure enough, but mainly because they are not overtly impressive.

As you might expect, piano is rendered particularly well. Abdullah Ibrahim, playing 'Whoza Mtwana' with the NDR Big Band [Ekapa Lodumo, Tip Toe], is a prime example of where the F2s excel. Ibrahim's piano is rich and sonorous, with appropriate weight and mass, but not big and lush. The band is bold and brassy, with just that authentic degree of stridency you expect from a jazz big band, and no added sourness from the loudspeaker. The piano's upper register was also gratifyingly free of aggression – a good example: Graham Fitkin's complex, rhythmic piece for two pianos, 'Piano Piece early 89' from *Flak* [Fitkin CD] ably demonstrates the F2's ability to delineate two separate lines of music, keeping the threads of the two intertwined pianos nicely sorted, without dissecting them into component parts, or dislodging your earwax with the high notes. ▶

"Despite their classical (in so many senses of the word) heritage, Brodmanns aren't too polite to boogie – so don't make the mistake of assuming these are loudspeakers mainly for classical music. I got excellent results with jazz and rock. The F2 loudspeakers will play loud, with excellent dynamics, spaciousness, and 'air', without that 'one too many cups of coffee' sense of trying that bit too hard."



▶ The Ravel Sonata for violin and piano, performed by Viktoria Mullova and Katia Labeque [*Recital*, Onyx Classics], was also interesting when played through the F2, because uniquely the piano is clearly on equal terms with the violin, and not simply an accompaniment. The F2 renders this not merely apparent, but obvious. When each passes the musical baton to the other, the interchange is clearly evident, as are the dynamic and rhythmic subtleties; the degree of interplay between these two world-class solo performers is one of the joys of this piece, and that is rendered here entirely without artifice or undue emphasis.

The most obvious difference between the 'Festival' FS series, of which the F2 is the largest, and the 'Vienna Classic' VC series is the quality of the drivers, and the arrangement of the horn resonator/sound board. In the F2, the base of the loudspeaker forms the sound-board, with the slot for the horn resonator formed by a small gap between the base and the rear panel. The VC series use a vertical slot, the full height of the cabinet, with a sound-board mounted proud of the cabinet sides to form the all-important slot. This makes for better bass output in terms of level, and degree of control. It is this bass where perhaps the F2's compromises are most apparent.

Bass is strong, powerful, and convincing through the F2, but lacks that *nth* degree of speed, focus, and tautness. Stanley Clarke fans, for example, may find themselves better served by something a little more nimble in the lower registers. He gets the sort of bass sounds on 'Bass Folk Song number 10' [*The Stanley Clarke Band*, Heads Up] that most of us could only get by hitting a piano bass string with a tyre iron, and that effect would surely benefit from a speaker with a faster, more immediate bass response; having said that, the overall sense of melody and flow of the piece through the F2s is impressively



natural and devoid of any sense of artificial emphasis. Clarke's position in a 3D soundfield is not as precise as I've known it, however; the loudspeakers do a very decent job of disappearing but performers and instruments don't quite coalesce into a definite space in the way that they do with my regular Focal 1028Bes. Miles Davis' 'Tutu' [*Tutu*, Warner] doesn't explode into life and the bass isn't as relentless as it is in some systems, although Davis' managing of the mood of the piece is clearly evident through the F2s and this still makes it a compelling listen.

Similarly, intensely rhythmic, driving jazz, such as '1979 Semi Finalist' from The Bad Plus' *Give* album [Columbia], may well benefit from the delivery of a more in-your-face loudspeaker; Reid Anderson's bass, while far from ponderous, trades a little agility and drive for weight and power. That said, the overall rendering is still potent, taut, and highly effective. Do not mistake this for a loudspeaker with big, bloomy, and blowsy bass. In absolute terms, it has peers that do a better job of the lowest registers, but that's just because their compromises lie elsewhere.

More subtle music, the Tord Gustavsen Trio being an excellent example, is very effectively and powerfully rendered through the F2. Gustavsen can get more intensity out of a mezzo forte than most pianists can manage with it all turned up to eleven; 'At Home' from *Being There* [ECM], builds naturally ▶

► and inevitably in energy and propulsion, a zephyr building into a gale while you barely notice. This doesn't work if the individual parts aren't finely and exquisitely balanced, but when it does work, as here, it is a deeply affecting piece of music. 'Six Pianos' by Steve Reich [*Drumming*, DG] was utterly mesmerising, too; the constantly shifting interplay of the six pianos created a compelling sense of relentless forward motion, which didn't let up until the final note, and all the more effective and breathtaking for it.

The F2 is a curious mix of the truly wonderful, and the occasionally flat-footed. But then, all loudspeakers are compromised, your weapon of choice depends on what you want it for, and I'd say the Brodmann F2's compromises are well chosen, all things considered. In fact, the F2 exhibited little that drew attention in a negative way, which is why I've homed in on the bass a little more than it deserves. This is a very unassuming loudspeaker, which mostly just gets on with the job of communicating music. It has an effortless and untiring sound. Sometimes, untiring is code for boring and bland. Here, it just denotes a speaker I'd be happy to listen to all day.

I did find myself rediscovering a lot of my orchestral and choral music. Lately I'd been hanging out more with the jazz side of my collection, so it was nice to revisit some old favourites and hear them in a new light. Although it's easy to overstate the classical link, it would also be fair to say that the Brodmanns are made for music like this. The sense of scale they offer for large musical forces, flooding the room with sound rather than throwing it at you, makes for an experience much more akin to sitting in the concert hall.

As I hinted in the opening paragraph, the Brodmann F2 has a 'ten rows back' presentation, rather than 'front row stalls', which is fine by me. So, if you want to wallow in the beauty of Brahms' German Requiem, rather than be pinned to your seat by the massed musical forces, then the Brodmanns definitely deserve your serious attention. It's a different style of delivery to many conventional loudspeakers, and in some ways it reminded me of a good panel such as the Magneplanar 1.7, albeit with more scale, power, and authority, but retaining that sense of unforced ease. There is definitely something very beguiling about the way the F2s set about their music-making. Highly recommended. +

"The F2 exhibited little that drew attention in a negative way, which is why I've homed in on the bass a little more than it deserves. This is a very unassuming loudspeaker, which mostly gets on with the job of communicating music. It has an effortless and untiring sound. Sometimes, untiring is code for boring and bland. Here, it just denotes a speaker I'd be happy to listen to all day."

TECHNICAL SPECIFICATIONS

Type: Two-way, three driver, floorstanding speaker with acoustic horn bass system

Driver complement: one Brodmann acrylic coated artificial silk dome tweeter, two sideways-firing Brodmann 125mm moulded paper and carbon-fibre bass/midrange units.

Crossover frequencies: 2.15 kHz

Frequency response: 36Hz – 25kHz ± 3dB

Impedance: 8 Ohms

Sensitivity: approx. 89dB/W/m

Dimensions (HxWxD): 1112x216x275mm

Weight: 19kg

Finishes: gloss piano black

Price: £4,795 per pair

Manufacturer: Brodmann Acoustics

URL: www.brodmann.at

UK Distributor: NuNu Distribution Ltd

URL: www.nunudistribution.co.uk

Tel: +44(0)203 544 2338