

Gato Audio FM-50

Best-known for stylish electronics, Gato Audio's foray into loudspeakers includes the flagship FM-50 – and it rocks
 Review: **Ken Kessler Lab: Keith Howard**

With their kidney-shaped cross-section and superb looks – as well as sound – Gato Audio's electronics have always begged a line of speakers to complement them. Starting with speaker building in 2010, the brand has now created a range which includes a couple of small two-ways, a wall-mount and two floorstanders, topping out with the Gato FM-50s – and they ooze Danish class. That's evident the instant you open the massive boxes, for the finish is mirror-like, the construction superb. The review samples came in high gloss walnut at £7450 per pair, while standard gloss black or white costs £6899.

RENAISSANCE CABINET

There's only one visual issue raised by these towers, but I will be tactful about this and try to put it into context – on the other hand, avoiding it is impossible. In no way could any seasoned audiophile see these without immediately thinking 'Sonus faber'. Younger enthusiasts might think 'KEF', 'B&W' or any of a number of makers of boat-tail designs, as followed in the wake of the Guarneri, decades ago. But I'd posit that it is no longer permissible to criticise brands that use this cross-section post-Franco Serblin [see *HFN* Jan '18], any more than 50 years ago could one criticise every speaker on the market that used a rectangular box for looking like an Acoustic Research AR-1 (or other early sealed enclosures).

Sonus faber calls it 'lute-shaped', others have their own names for it. Gato's Lead Acoustical Engineer, Rune Frost, concurs with what Serblin identified years ago. He says, 'The most obvious benefit is the reduction of standing waves inside the cabinet, but another nice feature is the transport and damping of vibrations inside the cabinet walls themselves. As the cabinet becomes thinner towards the rear of the speaker, vibration generated by drivers at the front baffle breaks up during

its travel through the cabinet sidewalls. Our "FusedMASS cabinet", laminating different cabinet materials, further dampens and reduces cabinet resonance very efficiently.' [See KH's Lab Report, p57.]

LEAN AND CLEAN

What you have in the FM-50 is a tall, rearward-sloping tower with a cross-section 405mm deep by 235mm wide. That said, the speaker sits on a massive bolt-on plate with adjustable spiked feet that increases the width (but not the depth) to 330mm. Each speaker weighs 40kg and may just be that bit too heavy to handle alone.

Keeping the visuals lean and clean, there is no full-length grille. Instead, separate round grilles held in place by magnets fit over each driver. The vertical array includes a 38mm ring radiator tweeter, a 150mm mineral-loaded polymer cone midrange and two similar 170mm woofers.

At the back are terminals for bi-wiring, plus an unusual feature to help fine-tune

performance to suit the room, the positioning, the electronics, or the user's subjective preferences. Above the speaker terminals are three sets of XLR sockets with little 'U'-shaped jumpers to bridge the

'The effect is dazzling – even with hoary ol' mono recordings'

holes for High, Neutral or Low settings. These adjust 'Detail', 'Focus' and 'Bass', with Detail affecting the level of high frequencies, while Bass 'allows you to change the richness of the lower notes of the music'. Focus is recommended for 'soundstage issues and excessive vocals or high-pitched instruments'.

Unfortunately, nowhere could I find what each setting actually does to the sound – how much level, or changes to frequency response, who knows? – but

RIGHT: Supported on an alloy base with four stabilising outriggers, the curved cabinet houses two Gato-designed 170mm mineral-loaded polypropylene bass drivers, a 150mm mid driver and one 38mm ring radiator tweeter



SYSTEM SYNERGY

Over the past five years, *HFN* has reviewed various Gato amplifiers [*HFN* Jun '17, Oct '16, Oct '13] and the company's DAC/preamp [*HFN* Oct '14]. Speakers complete an all-Gato system, ideal for those who want to avoid any possible mis-matches. Says CEO Frederik Johansen, 'Actually, Gato Audio has always been a speaker manufacturer. From the very beginning, it was Gato Audio's aim to develop both speakers and electronics, offering a complete system. But destiny would make us more successful in the business of electronics than speakers. We decided to add focus in developing this brand-new series of speakers in 2017. For some years we have used ATC monitors. They have always inspired us to do speakers that relay the reality, rather than the typical hi-fi "niceness" and polished sound. We are, however, not a company offering studio monitors and therefore we find our speakers and sound somewhere in the middle of the spectrum, between the harsh reality and the long-term pleasure of listening to a vast variety of recorded music. Our customers expect that we balance this middle way to perfection, offering the best of both worlds.'

'Neutral' worked perfectly in my room. While all of the changes were subtle to my ears, they were certainly *audible*, and experimentation is a must.

Again, I was reminded of Sonus faber because the FM-50s use a near-identical set-up regime, with the speakers angled toward the listener. Unlike the Sonus faber method, which has the line cross in front of the listener, Gato Audio suggests the FM-50s are aimed directly at the hot seat. I tried these in various positions, and the optimal performance followed an equilateral triangle, with the FM-50s at least 18in away from side and back walls.

ROOM-FILLING BLOOM

I had no qualms about using the FM-50s with my Audio Research REF6/REF75SE pre/power combination [*HFN* May '16] because these speakers are not exclusively voiced with Gato's own electronics in mind. My own, unscientific test for focus is simple: I play mono recordings and – if all is well – I will hear no difference in the position of the central image when I operate the REF6's mono button.

Turning to the early '50s recordings on the CD *Jackie Wilson With Billy Ward & The Dominoes* [Varèse Sarabande 302 066 553 2], using the tracks 'Danny Boy' and 'I'm Gonna Move To The Outskirts Of Town', I heard precisely what I had hoped to experience: dead-central sound.

What I hadn't quite expected, however, was a sort of spatial bloom that made the mono presence more room-filling than is anticipated of a single-channel source. The area between the speakers was filled, but with no loss of focus. It's hard to describe, and I know it sounds as if I were to suggest viewing a 4:3 film with the screen ratio set to 16:9, but there was no

image, *per se*, to distort unnaturally. It was simply bigger, wider and thus somehow more satisfying.

Far more important, however, was the actual *sound* rather than the perceived stage width. Wilson's voice is a powerful instrument, and while this forcefulness will be familiar to fans of big-voiced opera legends, nobody – not even Tom Jones – applied it to popular music with the sheer potency of Wilson.

Also crucial to appreciating how the FM-50s handle a tough recording was the reproduction of Wilson's subtle vocal wiles – little nuances, each a *non-sequitur*, embellish all of his performances, not the least being a sustain that defies one's understanding of lung capacity. Man, could he hold a note... Because the FM-50s have such wide-ranging dynamic capabilities, the singer's more challenging, melodramatic and, yes, operatic moments were captured without any unwanted constraint. The net effect is dazzling – yes, even with hoary ol' mono recordings.

MUSICAL BEHEMOTH

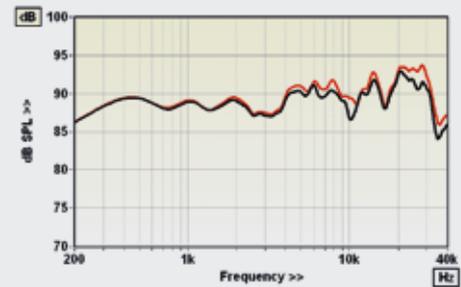
Moving on to something more demanding, I turned to the powerhouse masterpiece 'Go Back', which opens Crabby Appleton's eponymous masterpiece of a debut album [Man In The Moon; MITMCD31]. This is hard rock characterised not just by pile-driving but also somewhat manic drumming, reminiscent of The Who's Keith Moon when trying to make sure that he's hit every drum within reach. Punctuation comes courtesy of scalding guitarwork, while the vocals spit fire.

After the smooth and sexy sound of Wilson, 'Go Back' bursts from the speakers in all of its stereo glory, demonstrating how precise angling of the FM-50s rewards the listener with both a massive soundstage, ➔

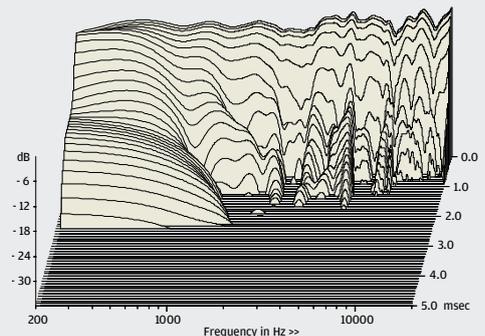
GATO AUDIO FM-50

Here's a rarity – a loudspeaker from an unfamiliar source that under-specifies its sensitivity! Gato Audio rates its FM-50 at 88dB but our measured pink noise figure of 89.3dB for 2.83V at 1m suggests an 89dB specification is fully merited. This is achieved, mind you, with recourse to a low impedance that Gato doesn't fully acknowledge. Its 4ohm nominal figure means that the FM-50's impedance modulus ought not to fall below 3.2ohm but we measured a dip to a low 2.4ohm minimum at 36Hz. With large impedance phase angles at low frequencies, this drops the EPDR (equivalent peak dissipation resistance) to a challenging 1.1ohm at 30Hz, although the dip to 2.2ohm at 323Hz will be more relevant on music lacking strong low bass content.

The forward frequency responses, measured on the tweeter axis with driver covers removed, show an obvious swelling up in output of about 1.5dB at crossover to the tweeter [see Graph 1, below]. Response errors are well controlled at ± 3.0 dB and ± 2.9 dB respectively, though pair matching over the same 300Hz-20kHz is marginally less impressive at ± 1.6 dB. A narrowband disparity at 10kHz contributes significantly to this, and without it the matching error improves to a much tighter ± 0.8 dB. Diffraction-corrected nearfield measurement indicates a bass extension of 43Hz (-6dB re. 200Hz), a fair but unexceptional figure for a reflex-loaded speaker of this size and sensitivity. The cumulative spectral decay waterfall [Graph 2] shows that while some of the treble unevenness is associated with what are probably midrange driver breakup modes, these are at moderate relative levels. Otherwise the decay in output is fast above 1kHz. KH



ABOVE: Forward response indicates a brightened presence and treble. Toeing-in is recommended



ABOVE: Cabinet resonances are well contained and even the midrange driver modes are quickly damped

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V – Mean/IEC/Music)	90.1dB/89.3dB/89.1dB
Impedance modulus: minimum & maximum (20Hz–20kHz)	2.4ohm @ 36Hz 10.5ohm @ 21Hz
Impedance phase: minimum & maximum (20Hz–20kHz)	-53° @ 26Hz 23° @ 432Hz
Pair matching/Resp. error (300Hz–20kHz)	± 1.6 dB / ± 3.0 dB / ± 2.9 dB
LF/HF extension (-6dB ref 200Hz/10kHz)	43Hz / >40kHz / >40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.2% / 0.6% / 0.1%
Dimensions (HWD) / Weight (each)	1075x235x405mm / 40kg

LEFT: Gato's 'PurePhase' crossover supports bi-wiring with further tonal adjustment possible via linking pins within three XLR sockets, marked 'bass', 'focus' and 'detail'

especially if he or she is one who also happens to like a whiff of refinement, even when they're playing air guitar.

UNBELIEVABLY SILKY

To ensure that I wasn't presuming the FM-50 was as gracious as it looks, I played one of the most refined recordings I had to hand, which is Perez Prado's *Big Hits By Prado* [RCA LSP-2104]. As it happens, this was also the LP – one of those near-mythical RCA 'Living Stereo's known for their unbelievably silky sound – that had proved to be the most revelatory moment of my sessions with the Serblin Accordos.

While brassy punch is the overwhelming trait of this recording, coupled to airy, wide-open – nay, grandiose – scale, it's never aggressive. Here was a flawless recording of an orchestra made almost 60 years ago, sounding so vivid, so natural, so real that the cynic in me forgot all about the corny, period cha-cha rhythms and the department store background music vibe.

As with the Accordos, the opening of 'Cherry Pink And Apple Blossom White' made the hairs on my neck stand up. It was scintillating, sparkling, soaring – the only possible criticism being the slightly too-taut bass, and a barely detectable hint of sizzle at the top. But those are hardly deal-breakers. ☺

HI-FI NEWS VERDICT

Elegant in behaviour, looks and sound, the Gato FM-50 is also full of surprises. Not least, it delivers more than I expected for the price. Had I not been told, I would have guessed that these retailed for £10,000 per pair. They generously reward painstaking set-up, so 'simple' they are not. Driven hard, they remain composed. Driven gently, they caress. All-in-all, they are tough to fault, and easy to enjoy.

Sound Quality: 85%



attack and solid imaging. This is not the most complex of recordings *vis-à-vis* stereo artistry, and despite a few positioning effects redolent of the era (circa 1970), it's all about creating a wall of sound, if in a non-Spectorian sense.

Via the Gatos, it's a behemoth – massive in every way, and loud enough to hurt, as the Gato FM-50s could deliver more than I cared to endure when it came to SPLs.

Most impressive of all, though, was the speed in the lower octaves, adding character rather than mere mass to the aforementioned drum sounds. This is, indeed, a speaker that will please the headbanger,