EQUIPMENT REVIEW

Raidho XT-5 floorstanding loudspeaker

by Roy Gregory

he XT-5 is a Raidho speaker, but it's a Raidho speaker with a difference. If you think you know how it's going to sound, best think again. When Alan Sircom reviewed the company's flagship model, the tall, elegant yet not too imposing DT-4.8 (Issue 161), he discovered a new and impressive breed of Raidho. That speaker was preceded by this one - the XT-5 is where it all started, and the good news is that it is smaller, more attainable (if not entirely affordable) but every bit as pretty as the flagship. In fact, such was the stepchange in performance compared to the previous models, irrespective of price, until the DT-4.8 showed up the XT-5 was the de facto flagship, despite sitting at the top of the company's junior range.

Raidho speakers have always made a lot of noise. This is not musical output you understand – although they've always put on an impressive show - but profile, especially media profile. For a small company with a short history, they've achieved a lot of reviews and attracted a lot of attention: partly because they looked so distinctive (and generally attractive), partly because they incorporated some genuinely different thinking (and not just the obvious, visible stuff) and somewhat because they sounded different (again, apparently so). The planar magnetic tweeter and those white, ceramic - later, dark grey diamond - coated cones are pretty distinctive. The speakers sounded distinctive too, with phenomenal speed, dynamic coherence and transparency. It made for an immediately impressive and musically articulate performance, and the rest is, as they say, history.



16 23 ISSUE 165

EQUIPMENT REVIEW / RAIDHO XT-5

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Except that, alongside those demonstrable strengths sat a set of similar weaknesses. I suspect that the real revolution in the Raidho speakers was the direct connection between the motor assemblies and the machined front baffles, eliminating the traditional driver basket and creating a far shorter path for the escape of spurious mechanical energy - hence the exceptional dynamics and musical clarity. But you can add to that mix a sound that leant heavily on the leading edge of notes, cropping the harmonic tails, crossovers engineered to generate a mid-bass hump and power handling that could have been better - a potentially fatal combination. The result was that the most impressive Raidhos were always the smallest while, with subsequent development fastened on trying to fill out the harmonic envelope and further improve speed and dynamics, the bottom end discontinuities and lack of deep bass became more problematic the larger and more expensive the speaker. Ultimately, that imbalance did prove fatal - to the company - and Raidho was acquired by Danish mainstream audio electronics manufacturer Dantax, who set about putting things right. That involved improving service in the field, but it also meant reassessing the product line and underlying engineering.

There was no denying the striking appearance, innovative engineering or sheer attitude of the Raidho speakers but they needed a bit of balance and a little polish – preferably without losing their attractive industrial design. Dantax drafted in some substantial speaker design expertise, including Benno Meldgaard, the man behind the beautifully-balanced GamuT loudspeakers. The existing models are getting an engineering makeover, with

EQUIPMENT REVIEW / RAIDHO XT-5

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suitably impressive results, but the XT-5 is a bird of a different feather, an allnew design that showcases both Raidho's latest cone technology and the revised engineering approach. It's the shape of things to come – and I'm not just talking about the elegantly elongated cabinet with its almost aerofoil cross-section...

If you've been paying attention down at the back, you'll have noticed that both the TD-4.8 and the XT-5 share a T in their product designation – although in this case that T is not a common factor. The T in TD denotes the use of a super expensive tantalum coating, confined to the outer reaches of Raidho's Diamond range and well beyond the outer reaches of most mere mortal's bank accounts. The T in XT stands for titanium-nitride, a development of the white Ceramix cones used throughout the more affordable lines. The "deep ceramic" process used by Raidho creates a three-layer structure, an aluminium core sandwiched between thick ceramic skins. It produces a rigid, lightweight cone with good self-damping – for a ceramic structure. Sputter depositing two, thin skins of titanium-nitride on each side of the Ceramix cone creates an even stiffer structure but crucially, one with better, more tuneable resonant behaviour. Combine that with a more powerful motor with twice the power handling of previous versions, and you have a driver that's more dynamic, more capable, and delivers a lower fundamental resonance. Add a decent crossover and that in turn translates into a speaker system that's more powerful, more dynamic and delivers more linear bass – but we're getting ahead of ourselves.

The XT drivers are tiny – a mere 100mm in diameter, roughly the same size as the bass-mid driver in an LS3/5A – so Raidho gives you six of them. That's six per speaker! You also get substantial outriggers fitted with adjustable feet - a nicety that used to be a (somewhat kludgy) cost option on older Raidho models, an unforgivable oversight on speakers with such long baffles, where rake angle is going to prove critical. Carefully flared slot ports are built into the rear spine to reflex load the bass. One more hangover from the good old/ bad old days: the XT-5 only accepts 4mm plugs, although that should have changed by the time you read this. These are classic Raidhos concerning their tall, slim profile, but the XT-5 takes that a stage further, the narrow 140mm battle tronting a depth of nearly 500mm and a height of 1300mm. That's deep, tall and SLIM. I've seen wings on aeroplanes with lower aspect ratios than this. It also makes for a speaker that is smaller than it looks in pictures and has a lower domestic impact still. From the front, you barely notice the XT-5, from the side you can't help but see it, but that's down to the sharply defined and steeply raked profile and the beautiful Birdseye Maple Burl veneer, something more generally associated with Bentley dashboards and super yachts than loudspeakers. The choice of this exotic veneer is both a statement of intent, a small hint of the XT-5's real importance in the world of Raidho and a significant contributor to the speaker's €39,800 price tag. You can always opt for a highgloss black finish and save yourself €4,500 without sacrificing performance. Or, if you are interested in just how important that titanium-nitride coating is, you could always listen to the X-5, a mere €26,900 in black, a speaker that employs all the same cabinetry and engineering as the XT model, but with standard Ceramix cones. You'll soon discover that while the X-5 is mightily impressive for the money, the XT-5 is well worth the extra.

Listening to this new Raidho the first thing you'll notice is their sheer musical presence. The XT-5 delivers all the attacking vim and dynamic vigour of older Raidhos, but now it's backed up with some honest-to-goodness body, weight, and welly. The bottom end is more profound than you have any right to expect from such a svelte cabinet, but it's also fast, tactile, and articulate, sure-footed, pitch-perfect and beautifully integrated. As a result, the mid-band has the sort of body, colour, and dimensionality that's a first for a Raidho floorstander, while still offering the same textural resolution and immediacy that has always been their hallmark.

Listen to Isabelle Faust playing Mozart's early violin concertos and the XT-5s deliver a real sense of the incredible skill of her nimble bowing, especially hooked up to a really quick amp like the CH Precision I1 or Goldmund Telos 590. But this is where you also get a real sense of presence, scale, and dimensionality, her movement relative to the microphones and the band around her. This is what the XT-5 brings to the Raidho party - and it's all to do with the when, where, and how of the speakers' bottom end. Go to the other end of the musical scale - the Shostakovich 5th will do nicely - and the slim Raidhos present all the stark, chill atmosphere of the opening, the shiver in the strings and the doleful chimes, but then they

165 **26** ISSUE 165

EQUIPMENT REVIEW / RAIDHO XT-5

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shock you with the sudden weight and impact of an orchestral tutti. This is bass with enough depth and more than enough power to shock and surprise, whether it's Yuri Petrenko waving his baton or the pounding thunder of the Gravity OST [Water Tower]. But the best thing about it is that it doesn't just arrive on time, it only arrives when it should. It brings that all-important sense of shape and body to the mid-band, scale and dimensionality to the acoustic, but it does it without slurring rhythms, smudging textures, or dulling leading edges. You get attack, definition, and more than enough weight to impress. There's no loss of the palpable dynamic impact, immediacy, and rhythmic drive that were always Raidho strengths, but now they are more expressive, more sophisticated, and far more subtle. You often saw older Raidho designs used with integrated amps because they needed the coherence of a one-box solution to help tie them together. The XT-5 works the other way round, taking the performance potential of high-end integrateds and stretching them as far as they will go, actually delivering on the budget esoterica promise. The XT-5s don't NEED power, but they do like it, so think at least 60 Watts of tubes or a solid 100 Watts of transistors to make them sing.

So, play a great recording and the XT-5s sound great: actually, more than excellent. Play a great recording, and they'll take you back with their incredible combination of delicacy, nimble micro-dynamics and immediacy, their ability to jump in level and density as the musicians demand it - real "they are here" capability. But that's not the XT-5s party piece or their greatest attribute. Sounding good on great recordings is smart but not that unusual: sounding good – unearthing the music on indifferent records – now that's special, and that's what these speakers can do. Whether it's the congested muddle of mid-80s multi-mic'd classical, or the average modern pop recording - all ProTools and loudness wars - the XT-5s have an unerring ability to extract every last ounce of energy and dynamic range, every last millimetre of space and separation, every last breath of air from the sonic quagmire. The next best thing to an audio decompression device, they bring the music back to life, but more importantly, they make it fun again. It's hard to make a case for the sonic quality of Orange Juice recordings, but when Edwyn Collins sings through the XI-5s, you really do wish you'd met a girl like her.

The XT-5 looks and sounds like a Raidho. But it also has poise and balance that goes well beyond just its looks. It has astonishing weight and power considering its slim proportions – and it delivers them (and the rest of the music) with purpose and enthusiasm. Some speakers are more polite than the XT-5, and there are some that are warmer, kinder, and altogether cuddlier: the XT-5s are a pair of musical Jimmy Choos – as opposed to practical, common sense Crocs. They're sharp, stylish, and not afraid to have a good time.

When Raidho decided to re-visit the top-end of their entry-level X-series, I'm not sure they were expecting to arrive at the XT-5. I'm not sure they

TECHNICAL SPECIFICATIONS

Type: Three-way, reflex loaded loudspeaker

Driver Complement: 1x Raidho planar

magnetic tweeter

2× Raidho TiCeramix 100mm

midrange

4× Raidho TiCeramix 100mm bass

Bandwidth: 33Hz–50kHz Efficiency: 90dB

Impedance: 6 Ohms
Dimensions (W×H×D):

 $145 \times 1300 \times 470$ mm Footprint: 300×470 mm Weight: 45.5kg ea.

Price: Birdseye Maple Burl - €39,800 High Gloss Black - €35,300

Manufacturer: Raidho Acoustics

URL: raidho.dk

UK Distributor: Decent Audio URL: decentaudio.co.uk Tel.: +44 (0) 1642 267012

anticipated just what a ground-up engineering overhaul of the company's driver technology and system design would deliver. The results are as impressive as they are promising - and not a little scary. For all the past prominence and genuinely remarkable moments, the XT-5 is the speaker that really marks Raidho's coming of age. It's like the family sent their awkward, slightly gawky, punk daughter (the teenager with all the attitude) away to finishing school. What they got back has enjoyed the benefits of a little judicious weight redistribution, stands up straight, has learnt how to walk (and dance), to converse in three different (musical) languages - and still has plenty of attitude. What they got back is tall, slim, elegant, confident, and impeccably turned out. What they got back is an audio supermodel! +

13 ISSUE 165