

KEF R11 Meta

KEF's R series adopts all the 'acoustic principles' of its far costlier Reference range, but is the big R11 Meta a 'disruptor' Review: **Andrew Everard** Lab: **Paul Miller**

How to make sense of the KEF speaker range? A sideways glance helps no end: comparing ostensibly similar models from across the company's four mainstream lineups – five, if you count the highly polished Muon flagship [*HFN* May '08] – will give a clearer idea of the way these various loudspeaker series dovetail together, even when the similarities seem greater than the differences.

Take the Reference range, for example. This does what it says on the tin, if you rule out the sculptural Blade speakers [*HFN* May '22] that sit above it, while the R series snaps very close to its heels. For each Reference speaker, there's a parallel R series model, so the £5500 R11 Meta seems very similar to the £17,000 Reference 5 Meta [*HFN* Jun '23] – both have KEF's latest-generation Uni-Q mid/treble driver, complete with the company's MAT (Metamaterial Absorption Technology), straddled by a quartet of bass units. However, while the Reference 5 Meta has alloy-coned bass drivers, those fitted to the R11 Meta are alloy-skinned with a pulp cone connected behind and to the motor system. The 450Hz/2.1kHz and 330Hz/2.5kHz crossovers, respectively, are also clearly 'tuned' differently.

SIBLING RIVALRY

The Reference 5 Meta also pips the R11 Meta slightly in size – at just over 1.4m tall complete with its fitted plinth, it's some 10cm loftier than the more affordable speaker on test here. Furthermore, while the Reference models are assembled in the UK, the R Series comes in from overseas manufacturing facilities run by KEF's parent company Gold Peak, which acquired the British audio brand some three decades ago.

The R series cabinets also miss out on the range of luxury finishes you'll find on their upmarket Reference stablemates, but whether in black or white gloss, or walnut finish, complete with drive units and grilles colour-coded to the cabinet, the R11 Meta both looks the business and delivers on the promise of its styling [see boxout, p65].

It's a fabulously big, powerful sound with bags of detail'

Of course, the adoption of the MAT 'maze' behind the aluminium dome tweeter, the better to control its rearward radiation and thus clean up the high frequencies [see PM's Lab Report, p67], has had the effect of bringing the R Series closer to the Reference models. Now used in many of KEF's designs, including the LS range of wireless speakers [*HFN* Sep '22] and Blade, it works together with the Uni-Q technology the company has been applying to its designs since this 'coincident source speaker driver' was launched back in the late 1980s.

Serious thought has even gone into the design of the full-length grilles – instead of relying on a fabric cover being sufficiently acoustically transparent, KEF has punched each grille with a huge number of microperforations (1801, in fact) to let the music flow through and still provide protection to the drivers.

The R11 Meta speaker might look big in our pictures, but in fact it's slender, with the cabinet just 20cm wide – any narrower would make it tricky to fit those 165mm diameter bass units into the baffle. It's room-friendly too, with two-piece foam bungs provided for the rear reflex ports, enabling them to be used as close as 20cm from the back wall. And with their high sensitivity and modest load they thrived on the end of the Constellation Inspiration monoblocks [*HFN* Oct '19] driving them in PM's listening room. The new Michi X3 Series 2 integrated [see p56], which is seriously powerful and rather more price-compatible, also makes for a grand partner.

FUN FACTOR

The R11 Metas impress almost from the off: even with a vintage track such as 'Corner Pocket' from Count Basie's *Live At The Sands*

RIGHT: Two pairs of 165mm alloy diaphragm/paper-coned bass units flank a 12th-generation Uni-Q array (with MAT). The tall, slim cabinet is stabilised by spiked outriggers and is available in three colourways – Gloss Black, Gloss White and Walnut, each with matching driver/trim colours



INSIDE THE BOX

The R11 Meta design may lack the obvious style of the company's Blades, or the luxury of the Reference series, but there's a lot more going on here than immediately meets the eye. The Uni-Q driver, with its tweeter nestled at the acoustic centre of the midrange unit, benefits from the appliance of KEF's MAT – this acoustic absorber is the key upgrade across the new R series speakers.

This version of KEF's Uni-Q features the familiar Tangerine Waveguide and phase plug above the treble dome, together with the continuous curve of the midrange cone and 'Shadow Flare' terminating the waveguide smoothly with the baffle and baffle edges. Attaching the MAT disc to the rear of the Uni-Q driver has also required a redesign of the 'back end'. This now has a large channel running through the middle of the midrange motor, aiming the rear output of the treble dome into the MAT disc.

On a more 'macro' level, each R11 driver is mounted in its own enclosure within the cabinet. The Uni-Q unit is completely isolated from the bass drivers, which are arranged in two pairs with interlinked enclosures, and separate reflex loading. The port tubes use KEF's flexible rubber construction, allowing them to dissipate resonances within the port structure without impeding the output. Moreover, the cabinet is not only heavy and stiff to resist resonances, but also braced by dividers – used to create the various internal volumes – which are coupled to the main enclosure using a viscoelastic material. Finally, strategic damping is also used throughout to tackle standing waves.



(*Before Frank*), recorded in 1966 [MFSL UDSACD 2113], the speakers deliver a fabulously big and powerful sound with bags of detail. This was a very easy listen without losing any of the 'hi-fi-ness' – think effortless focus and soundstaging, and punching out the band with real swing and ambience.

It's a presentation the R11 Metas carry through to the slow build of the march from Steven Spielberg's movie *1941*, performed by the Dallas Winds under Jerry Junkin [*John Williams At The Movies*; Reference Recordings RR-142SACD]. Here they play the opening woodwind with an impressive lightness of touch before upping the ante with crisp, clean brass and tight snare drums, before unleashing real 'jump in your seat' power from the bass drum and the full force of the whole band.

And that's what these speakers do – they've got all the fundamentals covered, leaving them free to get on with having fun making music. With 'Two Tribes', from

Frankie Goes To Hollywood's *Rage Hard – The Sonic Collection* [ZTT ZTT177SACD], it was impossible to ignore the speed of the music cannoning along, despite the room-shaking bass. These speakers are definitely not dull – so much so that I flicked back to the 'The World Is My Oyster'/'Welcome To The Pleasuredome' sequence, all 15-plus minutes of it, cranked the volume a little more, and revelled in all that clean slam. As I said, with the hi-fi niceties covered, the rest is sheer enjoyment.

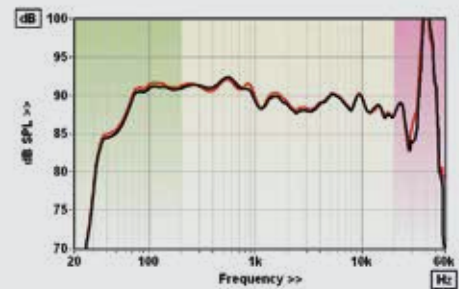
BY JUPITER!

Whatever the music, the R11 Metas deliver maximum appeal, from the way the little tambourine flourishes surface out of the full, rich picture of the orchestra in Holst's 'Jupiter' [*The Planets*, Hallé/Elder; Hyperion SACDA67270] to the simple purity of 'Perrine Était Servante' from Kate & Anna McGarrigle's *Dancer With Bruised Knees* [Warner Bros 7599-25958-2]. On this piece, the harmonies, backing vocals →

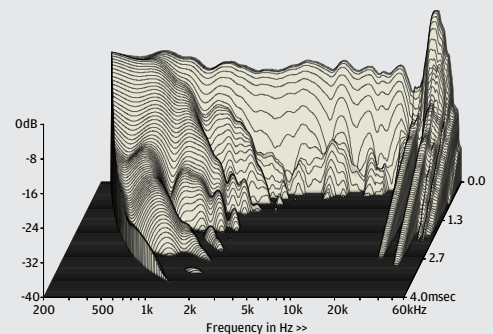
KEF R11 META

Just as we saw with the R3 Meta [*HFV* Sep '23], this latest 'Meta' version of the original R11 [*HFV* May '19] has also witnessed a top-to-toe refinement. Sensitivity is essentially unchanged at 89.6dB/2.83V/1m while the forward response is slightly downtilted [see Graph 1] with errors of just ± 2.7 dB and ± 2.4 dB (200Hz-20kHz), respectively. The dished area of its response is covered by the top-end of the 125mm alloy-coned MF section and lower end of the 25mm dome tweeter, either side of the 2.5kHz crossover, within the 12th-gen Uni-Q driver. This is also where any residual bass driver modes are visible for, once the labyrinthine MAT disc takes over, the R11's output is remarkably 'clean' [see CSD waterfall, Graph 2] just as conventional THD is squeezed down to a fabulously low $< 0.1\%$ (re. 90dB SPL).

Once again, the metal dome resonance is pushed out to a high 40.8kHz [pink shaded area, Graph 1] but its severity – some +12dB above the mean midband output – is rapidly curtailed by toeing the speakers very slightly away from direct line of sight. For the bass, its combination of four 165mm reflex-loaded alloy/paper-coned units, working over 60-440Hz (woofers 2 and 3) and 60-280Hz (woofers 1 and 4, all re. -6dB) are supplemented by two sharply tuned ports at 34Hz to deliver a 45Hz bass extension (-6dB re. 200Hz). Far deeper extension is possible in-room with boundary reinforcement. Importantly, this extension and sensitivity has not been won at the expense of a tough amplifier load – KEF's 4ohm (3.2ohm min) impedance rating and modest $\pm 41^\circ$ phase angles are precisely met in practice while the worse-case EPDR remains a 'driveable' 1.6ohm/945Hz. PM



ABOVE: Response inc. nearfield summed driver/ports [green], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. Left, black; right, red



ABOVE: Minor breakup modes associated with the alloy bass drivers but Meta scrubs the treble clean

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V – 1kHz/Mean/IEC)	89.6dB / 89.6dB / 88.0dB
Impedance modulus: minimum & maximum (20Hz–20kHz)	3.25ohm @ 620Hz 13.05ohm @ 2.5kHz
Impedance phase: minimum & maximum (20Hz–20kHz)	-41° @ 32Hz +41° @ 1.43kHz
Pair matching/Resp. error (200Hz–20kHz)	0.7dB / ± 2.7 dB/ ± 2.4 dB
LF/HF extension (-6dB ref 200Hz/10kHz)	45Hz / 52.9kHz/52.2kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.15% / 0.06% / 0.3%
Dimensions (HWD) / Weight (each)	1296x311x384mm / 37kg



LEFT: The flexible (rubber) tube sections of the dual reflex ports are just one of the R11 Meta's cabinet innovations [see boxout, p65]. Split crossover and dual 4mm cable posts, with an internal link, allow for bi-wiring and bi-amping

rock of Little Feat's 'Trip Face Boogie' [*Sailin' Shoes*; Warner Records 603497837434] or the chilling vocals and deep electronic bass of Lanterns On The Lake's 'Don't Have Nightmares' [*Versions Of Us*; Bella Union BELLA1478].

LIGHT AND SHADE

These are speakers to draw you into the music and not let go. They capture the scale of the organ on Masaaki Suzuki's second volume of his *...Plays Bach Organ Works* recitals [BIS BIS-2241 SACD], the Prelude and Fugue in G major showing not just the sheer size of the sound but also Suzuki's dexterity and ability to bring out the piece's light and shade. Similarly, they revel in the reinvention of Yes's 'Yours Is No Disgrace', which opens the new remaster of 1971's *The Yes Album* [Atlantic 603497831715], shifting from pounding prog to finely etched jazz with total ease.

And given Berlioz's 'Symphonie Fantastique,' on the Abbado/Berlin Philharmonic *The Last Concert* [Berliner Philharmoniker Recordings BPHR 160081], it's hard not to be swept along by the musicianship, turning a quick sampling into enjoyment of the entire piece. That's what the R11 Metas do – unfailingly but always surprisingly – and that's what makes them an absolute must-listen. ☺

and stripped-back instrumentation arrived in an entirely natural fashion.

Just a couple of weeks before listening to KEF's speakers, I'd found myself in a coastal pub, hearing a group of local musicians having their regular monthly session of trading songs and tunes. I hadn't gone for the music, just walked into it, and what had been planned as a quick drink turned into a whole evening of enjoyment, finding myself singing along with unfamiliar but catchy tunes, so involved had I become.

I was reminded of this by the R11 Metas, as they deliver that direct communication of the music, whether it's the goodtime guitar

HI-FI NEWS VERDICT

The R11 Meta speakers carry off their bluff styling with some flair, being neither as large nor as unmanageable as they may at first appear. Yes, the balance here is very commercial, flattering relatively modest systems but responding well to an uplift in partnering electronics, but what's wrong with that? These are impressive speakers, solidly built and designed to please – which they indubitably do.

Sound Quality: 88%

