

McIntosh MA9500

Like its predecessor, the MA9000, McIntosh's mighty MA9500 still combines transistors with transformers but the host of under-bonnet updates bring more than a little polish
 Review: **Nick Tate** Lab: **Paul Miller**

What should an audiophile demand from an integrated amplifier with a price tag approaching £15k? There's an expectation it should be beautifully built and finished and, more than likely, hail from a respected marque with a long pedigree. There must be a sense of owning something special and exclusive. The performance, meanwhile, will need to be at or near the top of what's possible at the price, and with no shortage of power. As for the new £14,995 McIntosh MA9500, and without wishing to give everything away in my opening paragraph, it looks to tick all these boxes!

This is the 2022 edition of the widely respected, four-year-old MA9000 [*HFN* Sep '18]. It's largely the same in terms of feature count, styling and ergonomics, but benefits from some important engineering interventions. For instance, the PSU now has twice the smoothing capacity for a claimed substantial increase in dynamic headroom, while upgraded components are said to deliver lower noise. And, last but certainly not least, is the 'Room Tested' DA2 Digital Audio Module.

DSD UPGRADE

Replacing the DA1 DAC module of the MA9000, McIntosh's new DA2 features the quad-balanced ES9028PRO DAC and offers DSD512 support, up from the DA1's DSD256, via its single USB-B input. There are also two coaxial and two optical inputs, a proprietary MCT (for SACD data) connection, plus an HDMI ARC input. All this enhances the MA9500's digital functionality, though there's no network connection, while analogue sources are well catered for by six unbalanced RCA inputs, two balanced XLR ins, and an MM/MC phono with adjustable loading.

RIGHT: Six pairs of ON Semiconductor 'Thermal Trak' power transistors per side [on heatsinks] are coupled to the loudspeakers via custom transformers with 8/4/2ohm taps. PSU includes 27,000µF / 100V reservoir caps [centre]. ESS9028 PRO DAC [top PCB] handles DXD and DSD512

Balanced and unbalanced preamplifier outputs are also included.

Like its predecessor, this new leviathan boasts a 300W/8ohm power delivery, achieved via the company's long-running Autoformer design with its 8ohm, 4ohm and 2ohm output connections [see PM's boxout, p61]. This claims to ensure partnering loudspeakers always receive a consistently high power output regardless of load impedance [see PM's Lab Report, p63]. And remember, this amplifier is solid-state through-and-through, rather than one of the transformer-coupled tube amplifiers for which the American marque is arguably better known.

Underneath the fascia's large backlit power meters – which accurately show output into 8ohm – the MA9500 sports a discrete, eight-band tone control that allows for manual adjustment of ±12dB in 2dB increments. This is an uncommon

feature, and one that might make purists shudder, but the ability to make subtle, closely targeted tonal adjustments should not be discounted. Plus this equaliser is equipped with a 'tone defeat' if you want to bypass the lot.

FEELING BLUE

Look at the MA9500 for just a few seconds and you'll immediately know it comes from

McIntosh, with its black front panel peppered with the brand's signature green and blue illumination. You'll either love it... or not. The backlit control legends set behind its Perspex fascia are a nice touch, while the central fluorescent blue

alphanumeric display, below the row of chrome-trimmed tone controls, adds to the retro-cool aesthetic.

Personally, I warmed to the MA9500's macho styling and found it a quality product to use, right down to McIntosh's

'It shimmered, locking everything in perfect time'





LEFT: The hallmark blue power meters – remarkably accurate into 8ohm – are underlined by a row of controls for the eight-band ± 12 dB equaliser, input select and volume rotaries. The MA9500 is a riot of colour once illuminated...

exceptionally robust 'SolidCinch' binding posts. The burning question, however, is how does this blue behemoth sound..?

LEAN MACHINE

I mentioned at the top of this review that paying top dollar must surely reward you with a commensurate performance. The MA9500 does precisely this, having a crisp, cleanly-etched sound and seemingly effortless reserves of power, although tonally this modern transistorised amp is a long way from the famous McIntosh 'valve sound' of yesteryear. It's spry and lean, lacking much romantic bloom, and doesn't attempt to embellish the natural tone of the instruments and performers on its stage. It's not prosaically matter-of-fact, but there is a hint of 'there it is, like it or loathe it' about its presentation in the round.

'The Ballad Of Epping Forest' by Genesis [*Selling England By The Pound*; Charisma

CASCD 1074] showed this to great effect. It's a typically dry early-1970s UK rock recording, albeit done to a high standard. Here, it didn't sound bright as such, but was definitely 'well lit' via the MA9500's balanced analogue input. Bass was a little light, but that's to be expected from this era and genre, and the midband occasionally slightly thin, the amp throwing plenty of sunlight upon the brighter, more shiny instruments used. It caught the wiry, sinewy sound of the synthesiser really well, for example, without going over the top.

McIntosh's beefy integrated had no problems with the Bowers & Wilkins 801 D4 loudspeakers [*HFN* Nov '21] resident in PM's listening room, connected initially through the 4ohm taps. This speaker is remorselessly revealing, and would give the MA9500 nowhere to hide. Thankfully, it didn't need to, although I found that switching to the 8ohm taps improved

the tonal balance somewhat. There was a subtle boost to the bass, and everything got ever so slightly softer and sweeter.

This wasn't a big 'night-and-day' change, however, and the MA9500's intrinsically taut and detailed nature didn't go away. The brass stabs on ABC's 'The Night You Murdered Love' [*Alphabet City*; Mercury 832 391-2] were satisfyingly raw, without being hard. They had an earthy timbre, free of glare. I've heard other systems erring towards the latter, in an attempt to make the track sound sassy and impactful, but even through the 801 D4s, the MA9500 stayed just on the side of the righteous. As the lead character in Rob Reiner's seminal *Spinal Tap* movie famously said, 'there's a thin line between clever and stupid!'

BALANCING ACT

Although I preferred using a dCS Vivaldi One [*HFN* Feb '18] as my audio source via the MA9500's balanced inputs, a Melco digital media server into the amp's internal DAC via USB wasn't too shabby. The sound was actually slightly more direct, but lacked a touch of the analogue input's space and subtlety. This was especially evident on Donald Fagen's 'Tomorrow's Girls' [*Kamakiriad*; Reprise WPCP-5210], where the USB input sounded very clean and insightful, but not quite as musically involving or intimate as the dCS source.

PM's Lab Report [see p63] reveals only a moderate boost in power output over the MA9500's predecessor, but that's not to say this big-boned amplifier doesn't have serious guts. When called upon to do so, with a chunky sounding recording such as the ABC track, things really start to rock. I heard a fast and grippy sound; 

TRANSFORMER COUPLING

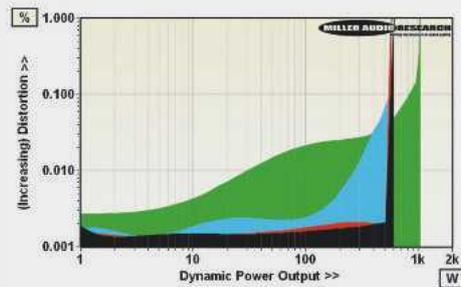
The MA9500's multifilar-wound transformer-coupled output has been a staple of McIntosh's high-power amplifiers for decades [MC510, *HFN* Jun '08; MC601, *HFN* May '11 and MA9000, *HFN* Sep '18]. Once again, this 'Audio Autoformer' ensures the MA9500 overwhelms its basic 300W specification with a 400W+ output [see Lab Report, p63]. In practice, while transformers are more commonly used to match the high output impedance of a tube circuit, and deliver useful power, to the low (8, 4ohm, etc) impedance of a loudspeaker, McIntosh is using its own transformers here to *manage* the MA9500's power into different speaker loads without fear of overload or overheating. Hence the consistent 300W rating into 8, 4 and 2ohm loads when measured via the 8, 4 and 2ohm secondary windings of its autoformer. (There are two secondary windings – one 8ohm and another for 4ohm with a 2ohm tap.) Moreover, with the secondaries and primaries interleaved for improved frequency response and forming part of the MA9500's feedback network, it suffers neither the high output impedance nor the distortion (at low frequencies) of the archetypal valve amp. PM

LAB REPORT

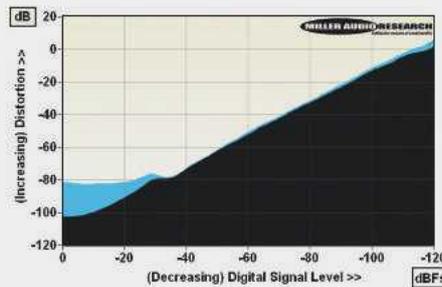
MCINTOSH MA9500

Although the principal claim to fame for the MA9500 is its increased reservoir capacitance and higher dynamic output over the lookalike MA9000 [HFN Sep '18], in practice there's not a substantial difference. Continuous outputs are 2x420W/8ohm and 2x415W/4ohm for the MA9000 versus 2x430W/8ohm and 2x425W/4ohm for the MA9500. Under dynamic conditions the MA9000 achieved 575W/8ohm, 545W/4ohm and 560W/2ohm via the 8, 4 and 2ohm output taps, respectively, with 935W/1ohm (30.6A) also via the 2ohm tap. Under the same conditions the MA9500 offers 597W, 557W, 582W and 1020W (31.9A) into 8, 4, 2 and 1ohm loads [Graph 1, below]. As before, distortion is well 'buffered' against output level or loading at ~0.0015-0.002% over the first 100W and with frequency from 0.0007%/20Hz to 0.002%/20kHz. Noise is moderately low, yielding an A-wtd S/N ratio of 87.4dB (re. 0dBW) while its frequency response stretches from -0.25dB/20kHz to -3.2dB/100kHz (8ohm tap).

The latest digital board, now based on an ESS9028PRO DAC with its default 'fast' linear phase filter, offers a much reduced 0.0006-0.008% distortion [see Graph 2] from its balanced preamp outputs (4V, with volume at 70%; maximum 16.3V at 94% volume). The preamp response achieves +0.0dB/20kHz, +0.4dB/45kHz and +0.1dB/90kHz with 48kHz, 96kHz and 192kHz media, respectively. The A-wtd S/N ratio remains a respectable 111dB and jitter is low, but not vanishingly so, at <220psec (all sample rates). Encouragingly, the MA9000's premature truncation of low-level detail is 'fixed' in the MA9500 which enjoys a fine ±0.4dB resolution at -100dBfs and ±1.1dB at -110dBfs. So this is more than a 'buffed up' MA9000! PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 31.9A



ABOVE: Distortion versus 24-bit digital signal level over a 120dB range at 1kHz (black) and 20kHz (blue)

HI-FI NEWS SPECIFICATIONS

Continuous power (<1% THD, 8/4ohm)	430W / 425W
Dynamic power (<1% THD, 8/4/2/1ohm)	597W / 557W / 582W / 1020W
Output imp. (20Hz-20kHz, Pre/Amp)	215ohm / 0.135-0.155ohm
Freq. response (20Hz-20kHz/100kHz)	-0.3dB to -0.25dB/-3.2dB
Digital jitter (48kHz/96kHz)	220psec / 125psec
A-wtd S/N ratio (DAC/Amp, 0dBW)	111.0dB / 87.4dB
Distortion (DAC, 0dBfs/Amp, 10W)	0.0006-0.0075%/0.0007-0.002%
Power consumption (Idle/rated o/p)	71W / 1.2kW (1W standby)
Dimensions (WHD) / Weight	445x240x559mm / 45.8kg



ABOVE: No fewer than eight line ins (six on RCAs, two balanced on XLRs) are joined by MM/MC, plus fixed (RCA) and variable (XLR) pre outs and 8, 4 and 2ohm speaker outputs. There are also four S/PDIF digital ins (two coax/optical) and a USB-B port

the programmed Linn drums enjoyed great attack and were tightly syncopated with the rhythm guitar and chiming keyboard work behind. The drum machine hi-hats shimmered away mechanically, locking everything in perfect time. The effect was thrilling, as you'd expect from a (then) state-of-the-art Bernard Edwards production.

MUSCLE MEMORY

So this amp can be lots of fun, but this character comes from its muscle rather than any tonal euphony. Take 'Something' by Booker T & The M.G.s' [McLemore Avenue; Stax SCD 8552-2] for example – a lovely, soulful and warm-sounding cover of George Harrison's Beatles classic. Here it sauntered along, but rather

than focusing on the sumptuous vibe of the recording, the amplifier majored on its sense of groove and musical direction. It caught the lovely, relaxed gait that the Stax session players had – something unheard in pretty much any modern band.

Soundstaging is suitably expansive for a muscle amp. The MA9500 has a scale and a depth that reminds me why people

LEFT: The HR085 is a system remote for all McIntosh separates. For the MA9500 it offers input selection, volume and mute



buy high-end amplifiers, and it's matched by a physicality that gives you a very tangible and direct sense of the original recording venue and/or studio. This visceral grasp of musical proceedings is both good... and bad. Everything sounds vivid and high intensity, so much so that it can almost surprise you – as did the clapping on Booker T's 'Something', arriving from the far left of the mix.

When fed with fast, hard electronic music, this amplifier further showed what it was all about. Elektric Music's 'TV' [Esperanto; SPV Records 084-92892] has powerful, elastic sub-bass which the MA9500 clung on to with real dedication, giving a wonderfully firm underpinning to this forgotten techno classic. One note of the bassline goes really low – subterranean almost – and this amp carried it with vice-like grip when most simply don't bother. Moreover, it showed no signs of fatigue when pushing out serious amounts of power, those meters swinging well east of due north! ☺

HI-FI NEWS VERDICT

The MA9500 is a memorable all-round package, one that's distinctively and originally styled, highly versatile and hugely powerful too. Most importantly, it is engaging across a wide range of musical genres while its three output taps invite subtle sound tuning. Best partnered with smooth, warmish-sounding speakers, this mammoth Mac should make many prospective purchasers very happy indeed.

Sound Quality: 86%

