

McIntosh MA252

This compact high-end integrated stereo amplifier both looks and sounds special, thanks to its old-meets-new McIntosh styling and hybrid tube/transistor design
 Review: **Nick Tate** Lab: **Paul Miller**

And now for something completely different. While McIntosh has been producing big valve amps for decades and, more recently, big transistor amps – including the MA9000 [HFN Sep '18] – it is arguably better known for its use of output 'Autoformers' that manage the power into different speaker loads. Yet this diminutive £4500 MA252 actually turns out to be quite different – a compact half-width integrated amplifier with a twist. It sports a vacuum tube preamplifier section, illuminated from below, making it the company's first ever valve/transistor hybrid amplifier.

The idea is to combine the potential sweetness of a tube preamplifier with the grip and grunt of a solid-stage power amp. Many enthusiasts – myself included – have experimented with this combination in the form of separate tube preamps and transistor power amps, but an integrated combination is a more convenient one-stop shop [see boxout, p57].

KEEPING SENTRY

It partners two 12AX7 and two 12AT7 tubes for the preamplifier stage, with a solid-state power amp section putting out a claimed 100W/8ohm and 160W/4ohm [see PM's Lab Report, p59]. The expensive Autoformers are conspicuous by their absence here, but the MA252 is equipped with Mac's 'Power Guard' technology, which monitors and adjusts the output in real time to prevent the power amp section from over-extending itself.

McIntosh's long-established 'Sentry Monitor' system is also fitted, a circuit that activates in case of accidental short-circuiting of speaker wires, disengaging the output stage before current exceeds safe operating levels. So the MA252 is a compact but powerful integrated that's largely foolproof in operation.

RIGHT: Modular construction – separate L/R power amps, with two pairs of output devices per side, are bolted onto Mac's monogrammed heatsinking. Note the huge PSU transformer and USB port [display PCB] for factory updates

Indeed, the MA252 is an interesting package in a number of ways, as it not only brings tubes and transistors together but is a quirky mix of the old and the new stylistically, too. There's more than a nod to classic McIntosh valve amplifiers like the MC275 [HFN Feb '13], for starters. The lower section of the amplifier is polished metal with distinctive McIntosh-style knobs fitted to its angled fascia. The side sports elaborately profiled 'monogrammed' heatsinks, with the upper casework, housing the power amp and power supply, in black-finished pressed steel. Those four tubes are up-lit by bright green LEDs that may not be to everyone's taste but they're not entirely decorative – they change colour to orange during warm-up or if the Power Guard system kicks in.

There's also a large-ish blue OLED display that sits on the front of the power amp case, showing your chosen source and volume settings. Aesthetically, there is no

doubt that some will find the blend of retro and modern styling elements to be rather brutal, but you certainly can't argue with how distinctive the amplifier looks and feels to operate!

SIMPLE SET-UP

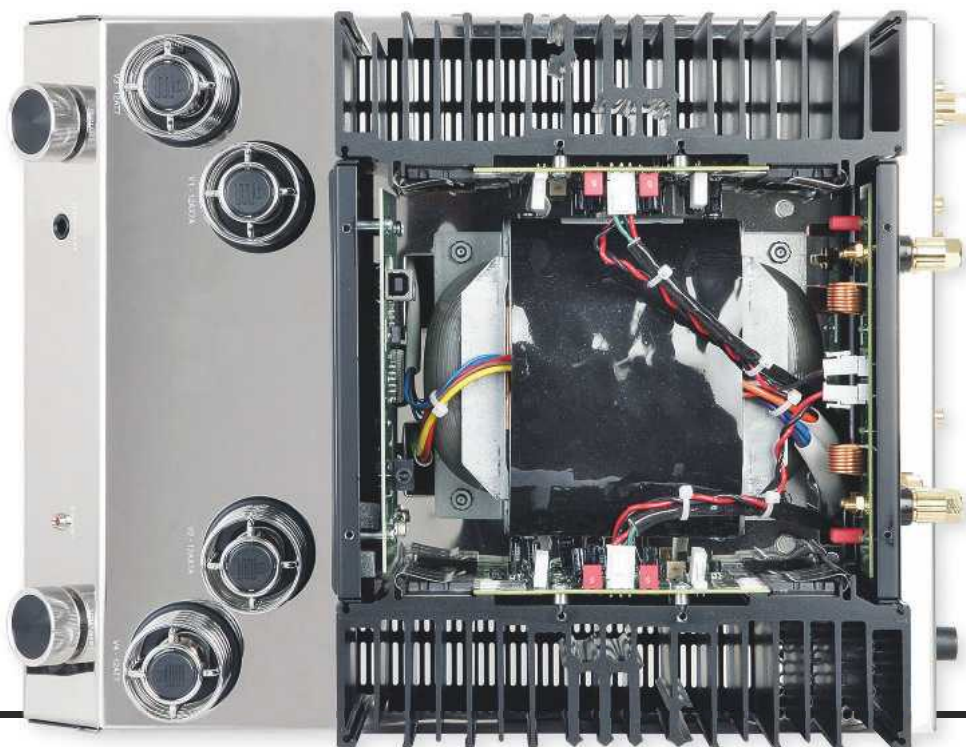
Connect the MA252 to mains power and the red standby LED comes on; switching it on is now but a push of the right volume

control knob away. This done, the 'soft' warm-up period begins and a few moments later you're ready to play music. Pressing the left control knob takes you into the menu, where you can adjust bass, treble and

balance settings. Set-up options are pretty minimal because this is a simple analogue integrated amplifier, having no digital inputs, for example.

Alongside two RCA line inputs, there's one balanced XLR and a MM phono input which can all be renamed via the set-up

'It's rather like peering into a shop window full of delights'





LEFT: The 12AX7a and 12AT7 triodes are illuminated by green LEDs, indicating all is well. Orange indicates warmup or protection while the blue display shows input, volume level and set-up modes

menu. Round the back you also find gold-plated speaker terminals and a separate subwoofer output. I found this little unit never became particularly hot in use, even when running at fairly high levels, although the chromed casework became a ready repository for dust and fingerprints.

CLEAR TO HEAR

Once the tubes and transistors are warmed through, it's clear there's much about the MA252's sound that's distinctly high-end. While not a fat or bloated-sounding amp

by any means, there's a subtle, buttery smoothness to the presentation that ensures almost every style of music you care to play is a pleasure to hear. And that holds true for all inputs, including the very respectable MM phono stage.

This isn't the end of the matter though, appealing as this alone might sound, because the amp's real standout quality is a natural rhythmic ease that feels so right. It's hard to describe in words – you end up resorting to clichés like 'liquidity' or 'fluidity' – but suffice to say that the music

just lilts along before your very ears, in a satisfyingly lifelike way. Last, but not least, is the very believable midband performance, that not only manages the trick of being smooth yet detailed but is three-dimensional too.

For many, the most important gauge of a serious hi-fi amplifier is its ability to string musical bars and phrases together in a believable way, while faithfully tracking the subtle dynamic inflections of the recording. In this respect the MA252 is hugely successful – Steely Dan's 'Home

At Last' [from *Aja*; MCA Records VDP-27] showed this hybrid integrated to be a most organic and authentic-sounding performer.

Although it's not a brilliant recording by modern standards, being released in 1977, the beautiful playing of Messrs Fagen, Becker and their backing band was readily apparent when heard through the MA252. The superbly syncopated arrangement snapped and shuffled along, the contemplative and rather lonely mood of the song captured perfectly.

Bass played an important part here, being surprisingly supple and taut. If there was a niggle it was that a little more grunt down below wouldn't have gone amiss, but the low-end was well integrated with the rest of the frequency range and at no point did it start and stop after the fact.

THE BIG REVEAL

The overall result was a sound that seemed effortless and all-of-a-piece, while being articulate and expressive too. Some amplifiers achieve the latter by being tonally forward and/or sharply etched, yet the MA252 managed to sound both smooth and sassy at the same time.

The MA252's midband is especially revealing of timbre and timing, and its beautifully intricate portrayal of Fagen's plaintive vocals underlined this. Things ➔

HYBRID HISTORY

Since it was founded in 1949, McIntosh Laboratory has made a name for itself as an amplifier specialist. The MC275 – a 75W per channel tube design – is surely its definitive product, but the company now makes great solid-state designs too. Only now with the MA252 though, has McIntosh produced a hybrid tube/solid-state integrated. The concept is far from novel, because companies like Luxman were doing them as early as the '80s – witness the LV-105 valve/MOSFET integrated of 1984. Nine years later, Copland's CSA14 ran a brace of ECC88s in its differential input stage with great success. Musical Fidelity launched its first NuVistor/transistor hybrid, the Nu-Vista 300 power amplifier, in 1999, with the M3 integrated in 2000. Later that decade, Vincent's SV-236MK was one of the strongest-selling hybrids due to its affordability and fine sound. Unison Research's Unico 150 won many friends in Europe, while Shanling's high-end A300 popularised the genre in the Far East. As ever more people become interested in the breed, modern designs such as PS Audio's BHK Signature 300 [HFN Jul '16] show just how good they can sound.

LAB REPORT

MCINTOSH MA252



ABOVE: No digital inputs here – just MM phono and three line inputs (two on RCA and one balanced on XLRs). Gold-plated 4mm speaker cable terminals are joined by a mono line out to feed an active sub, alongside sockets for remote power on/off

didn't change when I presented the MA252 with a more modern and denser slice of techno. The sensual strains of Sueno Latino's 'Sueno Latino' [From BCM's *Ambient House*; BCM Records 504220] showed how this amplifier can scythe through the mix without sounding in the least bit forensic or analytical. Again, this isn't a great recording, yet the MA252 threw the multi-layered sound into sharp relief.

This track also offered the opportunity to test – subjectively at least – the MA252's left. Impressions were of a powerful amp, yet this remained true only up to a point. With the amp set up in a large room and hooked up to tricky-to-drive speakers there was a sense of it running out of puff sooner perhaps than some similarly-rated 100-watters might have done.

'Is There Anybody Out There', [Parlophone CDR 6303] from British house duo Bassheads drove this point home. The track is a stomping piece of '90s techno, and while the four-on-the-floor rhythm snaked its infectious way across the room it was again apparent that the MA252 is not an infinite oasis of power.

LEFT: The HR091 handset offers control over input selection, volume and mute for the MA252 amplifier



True, nothing particularly untoward happens when you ramp the volume right up, but it's just that this little amplifier begins to sound like it's working hard for a living, with a slight diminution of dynamics and loosening of the bass.

WALK RIGHT IN

Nevertheless, at neighbour-friendly volume levels the MA252 has bags of charm. Listening to it can feel like peering into a shop window full of delights, and its soundstaging ability plays a key part here. So while it's not the ultimate I've heard in terms of throwing images far out left or right, it offers impressive depth. It delivered The Rolling Stones' 'Beast Of Burden' [Rewind; Rolling Stones Records 32DP 614] in a wonderfully engrossing way for example, bristling with grace, space and pace.

This is an amp that places elements of a mix accurately, letting you 'walk around' them inside the recording. The result is an immersive sound, one that makes anything you play seem all the more realistic. ☺

HI-FI NEWS VERDICT

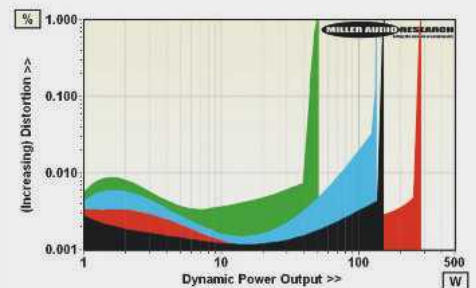
McIntosh's new MA252 hybrid has character aplenty and bags of charm too. Stylistically it's an odd combination of the old and new, but sonically it hits the spot bang on. Its tonal warmth is pleasant to live with, yet the real attraction is its liquid midband allied to fine detail and space. More than a marriage of convenience, this compact integrated shows that tubes and transistors can live very happily ever after.

Sound Quality: 85%

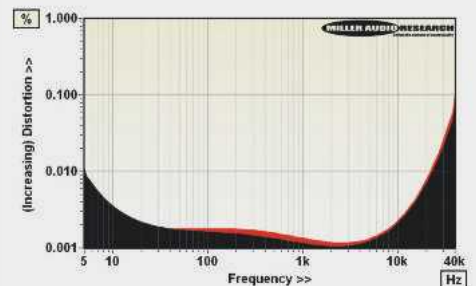


The combination of McIntosh's 'Power Guard' and 'Sentry Monitor' protection regimes are remarkably effective at preventing the MA252's output stage from 'clipping' much beyond 1% distortion no matter how hard the MA252 is pushed. However, the maximum dynamic power output figures recorded here of 152W, 285W, 155W and 52W (into 8, 4, 2 and 1ohm loads) are still entirely representative of what might be achieved in a real system [see Graph 1, below]. Also, with full power outputs of 2x125W/8ohm and 2x200W/4ohm comfortably exceeding McIntosh's 100W/160W rating, it's clear that while the MA252 is powerful it's not especially tolerant of difficult loads and is ideally partnered with loudspeakers offering a 6/8ohm nominal load. The triode/power amp PSU also generates a little extra noise so the A-wtd S/N ratio is also slightly below average at 80dB (re. 0dBW), but this will only likely become apparent with super-sensitive speakers.

Otherwise the MA252 is a model citizen, offering a very wide bandwidth (frequency response) with mere ± 0.5 dB limits over a 8Hz-100kHz span. The low 0.04ohm source impedance holds through bass and midrange as does distortion which stays below 0.002% from 20Hz-10kHz at 10W/8ohm, increasing to 0.008%/20kHz. The lowest distortion is through midrange frequencies at 5-20W output where it drops to $\sim 0.0006\%$, increasing to the previously mentioned 0.002% at lower (1W) and higher (60-100W) power outputs. Either way, THD is very well managed within the MA252. The digitally-governed volume control offers excellent channel balance (0.04dB at 0dBW) and channel separation is also very good at >80dB across the audioband. PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 8.8A



ABOVE: Distortion versus extended frequency from 5Hz-40kHz at 10W/8ohm (left, black; right, red)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	125W / 200W
Dynamic power (<1% THD, 8/4/2/1ohm)	152W / 285W / 155W / 52W
Output imp. (20Hz-20kHz/100kHz)	0.038-0.061ohm / 0.31ohm
Freq. resp. (20Hz-20kHz/100kHz)	-0.1dB to -0.05dB/-0.38dB
Input sensitivity (for 0dBW/100W)	55mV / 566mV (balanced)
A-wtd S/N ratio (re. 0dBW/100W)	79.5dB / 99.5dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.0011-0.008%
Power consumption (Idle/Rated o/p)	34W / 356W
Dimensions (WHD) / Weight	305x194x457mm / 12.7kg