

# Marantz UD9004 (£5000)

*Hi-Fi News* carried the exclusive review of the world's first universal CD/SACD/DVD/BD player, from Denon. Now we have the second, and it's from the very same stable.  
**Review and Lab: Paul Miller**

It's not a coincidence that the second 'universal' CD/SACD/DVD-A/BD disc player on the market is from Marantz, the first hailing from Denon in the form of its revolutionary DVD-A1UD [*HFN*, Oct '09]. Industry watchers will already know that Denon and Marantz both come under the umbrella of D&M Holdings [see boxout, p37] and that certain core technologies are shared – but only to a point.

So let's be clear at the outset: the £5000 UD9004 is not simply one of Denon's £4500 DVD-A1UD players housed in black Marantz livery. And what finery, Marantz relocating the litany of logos that underlines Denon's fascia to its top surface for a more sober facade clearly modelled on its exclusive KI Pearl series [*HFN*, Sept '09]. Basic transport, CD/SACD layer and HDMI controls are offered on this stunning black panel while the vast majority of supplementary features, including menu navigation, are hosted by the remote control.

**YES IT DOES...**

In common with the DVD-A1UD, the UD9004 is compatible with dual-layer SACDs, standard and HDCD-encoded CDs plus high density DVD-A and Blu-ray media. In fact when the UD9004 was first announced there was some confusion as to whether it would recognise DVD-Audio discs. Our own news story certainly suggested otherwise. In practice, the UD9004 handles DVD-A media just like Denon's DVD-A1UD. Furthermore, SD cards, CD-R/RW or DVD±RW discs carrying DivX6, WMA, AAC and MP3 files are also processed transparently. This player is fully compliant with BD Profile 2.0 so the SD card slot is also used to both route and replay downloaded bonus content.

**RIGHT:** Taking cues from Denon's DVD-A1UD, the UD9004 offers basic transport buttons on the fascia. The SD card reader (up to 8GB) will playback LPCM, AAC, WMA and MP3 audio files plus JPEG and DivX picture/video files

Now, I must admit that I've not disassembled both players down to the last bolt but the information to hand suggests they are both built around the same digital chassis, a 32-bit SHARC processor offering 7.1 channel Dolby TrueHD and DTS-HD Master Audio decoding while a 10-bit HQV REALTA processor from Silicon Optix delivers 1080p scaled video from DVD and motion adaptive digital noise reduction with both DVD and Blu-ray. The digital engine also supports two configurable HDMI 1.3a outputs allowing HD audio and video streams to be separated at source.

Both players use the same and potentially baffling graphical setup menu but they are employing different, if not just different generation, firmware as variations in their bass management suggest. Updates are facilitated via the player's Ethernet connection, incidentally. To wrestle full control over the UD9004's multichannel analogue outputs you'll need to go to *HDMI*

*Setup > Audio Setup* and set this to 'Mute' before returning to the top Audio Setup menu where the (analogue) 7.1 channel level and distance options then become available. To enable the speaker configuration options (speaker size and crossover frequency) the Source Direct mode needs to be switched from 'On:50kHz/100kHz' to 'Off'. Only now may you fully configure the UD9004 as a

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standalone source offering 7.1 channels of analogue sound from its RCA/XLR connections and 1080p/60Hz/24Hz digital video over HDMI.

**UNDER THE BONNET**

The practical differences between the DVD-A1UD and UD9004 reflect the core competences of each engineering team. Denon has concentrated on





reducing jitter over HDMI with recourse to a Denon Link re-clocking scheme that's in tune with its latest AV amps and processor. Marantz, by contrast, has focused on the player's analogue output with a bespoke power supply using a screened toroidal transformer and custom electrolytics. Four separate PCBs are devoted to the balanced stereo outputs, the standard stereo (L/R) outputs, centre and surround L/R outputs and the surround back L/R and sub outputs. As fans of the marque might expect, a combination of Marantz's proprietary HDAM and SA2-series HDAM op-amps service the final analogue stages on each of these boards. These modifications alone are more than sufficient to ensure the UD9004 enjoys a sound quality that's quite distinct from the DVD-A1UD and far closer, in practice, to Marantz's own SA-KI Pearl and SA-7S1 CD/SACD players.

With brand hallmarks in mind, it's not only the substantial solid-copper isolating feet and copper-coloured rear panel screws that reflect Marantz's long-lived affair with this metal, for the entire inner chassis of the UD9004 is folded from 1.2mm copper-plated steel sheets, reinforced by a 3.2mm steel bottom

plate. With its substantial black outer jacket in place, the UD9004 tips the scales just shy of 20kg.

Marantz's universal chassis may lack Denon's synchronising HDMI clock feed, but this feature is only applicable with one or more of Denon's high-end amplifiers and processors. If the audio decoding is performed within the UD9004 then the DVD-A1UD scores no advantage with its Denon Link 4 upgrade. And why would you not deploy the UD9004's decoding engine and tweaked audio stages to their full potential? After all, the multichannel audio outputs are not an afterthought, they are its raison d'être, for any AV amplifier with 5.1 to 7.1 analogue inputs, regardless of vintage or HDMI compatibility, will witness a new lease of life with the universal UD9004.

### ARMED & DANGEROUS

My initial listening confirmed what I had suspected from the lab data – this player has a powerful and very slightly over-rich balance (it's all in the jitter...), a rumbustious and earthy quality that packs a disarming wallop. With the Krell wound up just short of stun, the temptation to spin Pink Floyd's multichannel re-release of *Dark Side...* on SACD [EMI 7243-582136-

**ABOVE:** The legend says 'Super Audio CD/Blu-ray disc player' but the UD9004 also handles CD/CD-R and CD-RW along with DVD±RW and, importantly, multichannel DVD-Audio media

2] was overwhelming. As the opening heartbeat began to pound in my ears I knew this was not a player for the lily-livered, a premonition fulfilled as the raw energy of 'Breathe' segued into the tension of 'On the Run' and the rude awakening of the clocks that open the timeless classic that is, er, 'Time'.

The energy that throbs through this album was brought to visceral life by the

'The fine detailing of guitar, keyboards and percussion was exquisite'

UD9004, despite it failing to disguise the limited dynamic range of the recording or, indeed, the regular bursts of distortion as the guitars and keyboards play fast and loose with 1970s analogue recording technology. No matter, for the UD9004 still held true to the essence of the music, transporting me back to a time when live rock gigs were a regular feature of student life in London.

I would also have dearly wished to witness Jerry Goldsmith conducting the LSO through his *Movie Medleys* at Abbey Road [SACD demo disc] but Marantz's player took me part way there at least. The player's strong bass register ensured the rumble of low winds, brass and tympani brought both gravitas and urgency to the 'Star Trek' and 'Voyager' scores as the strings and horns soared into the room to palpable effect. Multichannel music players like the UD9004 were made for popular classics like this, for even though a two-channel downmix still delivers a fair sense of the orchestra's scale and authority ☞

## POWER BEHIND THE THRONE(S)

For many years Marantz was a subsidiary of the Dutch giant Philips, producing 'breathed-on' versions of Philips' CD platforms – classic models including the CD52 and CD63 series held sway for many years. However in 2002 Marantz, along with Denon, were consolidated into D&M Holdings Inc, succeeding them as a publicly-traded company on the Tokyo Stock Exchange. This powerful company has subsequently acquired other famous brands including Snell Acoustics and McIntosh. D&M Holdings is analogous to the Brawn GP F1 racing team, with Marantz and Denon having their own engineers and game plan much like messrs Button and Barrichello. They are part of the same 'team' but enjoy a rivalry that brings out the very best in each. As a result Marantz and Denon, collectively, are streets ahead of competitors – Sony, Pioneer and Onkyo to name three – when it comes to offering an all-singing and dancing silver disc player.

## UNIVERSAL PLAYER



**ABOVE:** Balanced stereo XLRs are joined by 7.1 channel RCAs, an Ethernet connection for firmware updates and to access BD Profile 2.0 Bonus View content, plus two independent HDMI outputs (for audio and/or video)

you'll never hear the bells and massed strings of 'Barnaby Jones' swell and lift the roof off your room with anything less than 5.1 channels spinning their coherent spell.

### YE OLDE SILVER DISC

Of course, between the wealth of material – new and old – being released on either 180g vinyl or as hi-res downloads, the original stereo CD format has not quite fizzled out. Anekdoten's 2009 two-CD compilation *Chapters* [kscope 115] still had a pulse thanks to the UD9004, especially via its balanced XLRs which offer a slightly freer, fresher and transparent perspective.

This is a difficult album, emotionally intense and instrumentally dense it can easily thwart the resolution of run-of-the-mill players. Fortunately, the UD9004 delivered this tight bundle of sound without its dark rhythm running roughshod over the equally black vocal content. I made it to the very end, which is rather further than Denon's DVD-A1UD carried me with the very same disc.

Nevertheless, I doubt whether creating a rose-tinted picture of a 27-year-old 16-bit format was especially high on either engineering team's agenda. The UD9004, like the DVD-A1UD, is a modern player for modern hi-res formats. It's salutary to remember that the multichannel score on a BD movie disc surpasses the bandwidth and resolution of stereo CD by some significant margin...

### HI-RES HAS IT

So to Blu-ray and the release of Pat Metheny's *The Way Up – Live* [ERBRD5001] recorded over a six

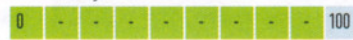
month period on tour. This musical document is not the most thrilling or vibrant testament to the man's talents – a far cry from *As Falls Wichita...* to be sure – but the crispness of both visuals and sound illustrates beyond doubt what can be achieved with a full 24-bits of audio resolution. The disc offers 5.1 channel LPCM, Dolby and DTS-HD Master Audio encode options, the latter proving to be the most persuasive when decoded within the universal UD9004.

The fine detailing of guitar, keyboards and percussion was exquisite, the almost limitless sense of space an accurate reflection of the venue while the occasionally eerie ambience rendered my speakers invisible. This was, and is, immersive audio at its technical best even if the content might have benefitted from a few rough edges to lift it from the textbook of progressive jazz. As multichannel BD music content slowly evolves, the UD9004 can only warm to its task. ☺

### HI-FI NEWS VERDICT

'Does the UD9004 beat Denon's universal?' is the question on our front cover. Frankly, Denon has the digital edge over HDMI while Marantz offers the warmer analogue sound. But if you've already chosen a Marantz SACD or a Denon DVD player for your system then you'll already have a view on the outcome. So why not let brand loyalty dictate which way the coin falls? Either way, you'll not be disappointed.

Sound Quality: 89%

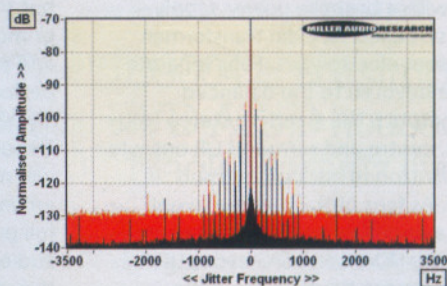


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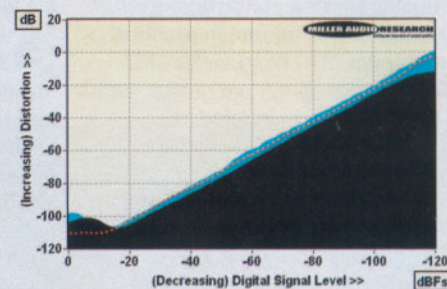
Direct comparisons with Denon's DVD-A1UD are only slightly complicated by differences in the players' default output levels – 3.95V balanced but 1.0V unbalanced from the UD9004 versus 2.2V from the DVD-A1UD. Otherwise its distortion vs digital level [see Graph 2, below], 113dB A-wtd S/N ratio (balanced output) and >105dB stereo separation are all mirrored by the Denon. Both players share the same digital filter software, yielding 95dB stopband rejection with CD/48k DVD and 47dB rejection with 96kHz media and both have the same and slightly premature HF rolloff with CD (beyond 18kHz, falling to -2.8dB at 20kHz). There are very subtle differences in response 'shape' thanks to their bespoke analogue outputs.

Real differences exist with SACD and 192kHz DVD-A replay where the Denon reaches -18.5dB/100kHz (SACD) and is flat to within -0.3dB/80kHz (DVD-A) while the UD9004 falls away to -27dB (SACD) and -5.9dB/80kHz (DVD-A). Once again, these are characteristics of the analogue stage(s). The players are using different bass management codes, with the Marantz offering a superior 'All Large' setting with the LFE channel at -5dB (vs. -12dB for the Denon).

The core difference lies in the spread of jitter – vanishingly low at 22psec with 48kHz/24-bit media in the Denon but boosted to over 1000psec thanks to interference from Marantz's custom power supply solution in the UD9004 [Graph 1, below]. Readers may view the full gamut of CD, SACD, DVD-A and BD (including bass management) QC Suite test reports for Marantz's UD9004 universal player by navigating to [www.hifinews.co.uk](http://www.hifinews.co.uk) and clicking on the red 'download' button. PM



**ABOVE:** Jitter spectrum showing 48kHz/24-bit data from DVD/BD (red, 1060psec) vs. SACD (black, 910psec). Sidebands are 100Hz, PSU-related.



**ABOVE:** Distortion vs. digital level over a 120dB range. 16-bit CD data (bal. out, 1kHz, black and 20kHz, blue) vs 24-bit DVD/BD data at 1kHz (unbal. out, dashed)

### HI-FI NEWS SPECIFICATIONS

Maximum Output Level (Balanced)	3.95Vrms
A-wtd S/N Ratio	112.6dB
Distortion (1kHz, 0dBfs/-30dBfs)	0.0004% / 0.0037%
Distortion & Noise (20kHz, 0dBfs)	0.0005%
Freq. resp. (CD, 20kHz/SACD, 100kHz)	+0.0dB to -2.75dB / <-2.75dB
Digital jitter (CD/SACD/24-bit BD)	1060psec/910psec/1060psec
Resolution @ -120dB (24-bit/48kHz)	±0.1dB
Power consumption	57W
Dimensions (WHD)	440x164x409mm