

Oppo UDP-205

Oppo's multi-faceted universal disc player combines the apex of audiophile DACs with cutting-edge 4K video technology. Is this really all things to all enthusiasts?

Review: **Steve May** Lab: **Paul Miller**

The relative success of UHD Blu-ray – the 4K upgrade of the now well-established video format – appears to have given universal disc players a new lease of life. SACD and DVD-A playback was always an attraction on higher-end DVD and Blu-ray players, but when player sales began to slow down, the long term prognosis for the category seemed poor. Then UHD Blu-ray came along and, much to the surprise of many, actually began to sell.

The £1399 UDP-205 reviewed here is hands down the most ambitious, and expensive, Universal UHD deck launched to date. Oppo, which earlier this year introduced the cheaper 4K-enabled UDP-203, has upped the ante with a ferociously specified disc spinner clearly designed to win over audiophiles. Like its stablemate, the UDP-205 plays 4K Ultra HD Blu-ray, regular Blu-ray, DVD, DVD-Audio, SACD and CD, and is a well-equipped network streamer. However, it adds a number of upgrades to the mix, including a class-leading DAC and a balanced stereo output.

AUDIO AT ITS HEART

The result is an audio-centric Blu-ray deck with gobs of functionality. I've always enjoyed the character of Oppo's players, and this newcomer plays to the brand's strengths. It's clinically precise, occasionally sacrificing heart and soul for unflinching detail, but when dialed in with higher quality sources, rewards handsomely.

It's fair to describe Oppo as a somewhat enigmatic brand. It's probably best known for DVD and Blu-ray players, but it also has a thriving smartphone business. And the brand harbours audiophile aspirations as witnessed by its range of planar magnetic headphones [HFN Jul '14, Feb '15 & Jul '15], HA-1 headphone amp/DAC [HFN Sep '14] and Sonica desktop DAC.

RIGHT: Oppo's 5.1/7.1 multichannel audio PCB [left] uses the flagship 32-bit 8-channel ESS Sabre DAC for its output with another, on a dedicated board [right], for its balanced (XLR) stereo audio outputs. Note toroidal PSU transformer

The UDP-205 is actually a direct successor to the universal BDP-105 BD player [HFN Jan '13]. By way of comparison, this update has slightly superior build quality, utilises a pair of flagship ESS Sabre ES9038 Pro DACs but still sports both an XLR balanced and RCA single-ended stereo output, in addition to 7.1-channel analogue and HDMI connectivity.

Oppo has never been a brand to take its disc players lightly, so the UDP-205 weighs in at a healthy 10kg, which puts it firmly in the heavyweight category of disc spinners. The industrial design is sharp-edged and classical with a double-layered chassis adding rigidity and heft, while heatsinks and ventilation grilles allow the UDP-205 to run cool without a need for fans. The front fascia is hewn from aluminium, with a neat hairline finish and the whole shebang sits on heavy-gauge machined feet, which offer additional isolation. The disc loader is smooth and quiet. So it's not a thing of beauty, but is sure built to last.

HDMI connectivity is in line with pretty much every other UHD player out there. Two HDMI's usefully allow sound and 4K vision to be routed directly through an AV

receiver that's equipped with HDMI v2.0 HDCP 2.2 (using the Main output) or to be separated, with pictures sent directly to a display and audio fed to a non-4K enabled AVR (using the Main and secondary Audio Only output). Meanwhile, the player also includes three USB inputs – two fast USB 3.0 connections on the back, and a front fascia port for transitory thumb drives. This provision works well when you park a large USB HDD on the rear (I used a 160GB portable drive). Wi-Fi is standard, connectable over both 2.4GHz and 5GHz, and there's an Ethernet port for those that prefer a wired LAN connection.

DEEP DIVE

Oppo continues to persevere with the idea of using its Blu-ray players as a media hub with integrated DAC. Consequently, the UDP-205 has an HDMI v2.0 input, optical and coaxial digital inputs, along with asynchronous USB that supports up to 768kHz PCM and a claimed 8x speed DSD512. As before, the heart of the player is a custom MediaTek platform, produced in collaboration with Oppo, and includes two (eight-channel) ESS Sabre ES9038 Pro





DACs used independently for the stereo and multichannel outputs. The separate, internal headphone amplifier is connected to the stereo-serving DAC.

There's a high level of deep dive adjustment available here, far more so than on the older BDP-105. If you want to manage the characteristics of the DAC, there are seven filters to play with [see the boxout, below, for PM's insights]. There's clearly enormous potential here to agonise over which sounds best, but I was told that the default is 'MP (Minimum Phase) Fast' rather than Brickwall or Linear Phase (LP) Fast, and selected by the player's engineers as the filter that gives the best all round performance.

In practice, I used this filter for most of my auditioning, but not exclusively. For example, on Metallica's 'Enter Sandman' [Metallica, Virgin EMI], the 'Minimum Phase Corrected' filter dulls James Hetfield's sharp-edged presentational a tad, but in the process actually makes the player a little more fun to listen too. Ultimately,

'There's a precision here which is often astonishing'

these filters are very much a matter of taste, but it's worth experimenting.

I won't dwell overmuch on the player's video functionality. Suffice to say picture quality is excellent, a zone plate test pattern confirming that the UDP-205 delivers every scintilla of high frequency detail in a 2160p video signal, without any patterning or artefacts. Colours are wide and noise free while regular Blu-rays also look fabulous, with upscaling to 2160p resolution. Out of the box, the player supports the HDR10 High Dynamic Range standard, but Oppo

has promised a firmware update for Dolby Vision, which is now beginning to appear on some UHD discs.

Its usability is best described as workmanlike, with a main interface that comprises a strip of buttons – Disc, Music, Photos, Movies and Network – each of which artfully changes the Home image backdrop. The main setup menu, a simple text based tree, will be familiar to regular Oppo users. The network tab brings up

ABOVE: Heavyweight and purposeful fascia belies the depth of technology and flexible operation offered by this flagship player. The menu is best navigated via a connected display

connected PCs, NAS and Media Servers which, in this instance, meant the player had access to a Twonky server running on my QNAP NAS and Bluesound Vault 2 NAS/ripper, which appeared as an SMB share.

PUNCHY YET SMOOTH

I hinted earlier that the UDP-205 can sound overly analytical, but while it doesn't have the easy-going musicality of, say, Sony's (much cheaper) UBP-X800, there's a surgical precision here which is often astonishing. Pink Floyd's *Creation: The Early Years 1967-1972* CD [Parlophone/PFREY8] is a glorious assortment of early tracks and remixes, many as thin as Trump's thatch, but the clarity and depth the UDP-205 managed to reveal was remarkable.

Switching to some chamber music, one of the more noteworthy CDs to have landed on my mat this year was *A Piazzolla by Strings and Oboe*, by the Unamas Piazzolla Septet [Ottava OTVA-0012].

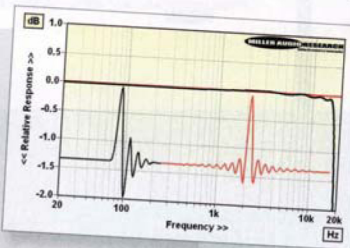
This is a beautiful recording, a feast of violins, cello and bass, which the UDP-205 didn't underplay. In 'Oblivion', Oboe floated above a plucked bass, while the rest of the strings fiddled behind. There was air between each musician, the soundstage was wide and accommodating

while the overall presentation managed to sound punchy yet uncannily smooth.

Of course, the player comes into its own with higher-res content. The Beatles' 'Day Tripper' [7+, remastered in 96kHz/24-bit on Blu-ray], sounded preternaturally fresh. Beautiful double-tracked George Harrison guitar, tambourine placed high to the right and George Martin-manicured harmonies – the UDP-205's delivery was sublime. ☺

WHICH FILTER?

Alongside claimed improvements in distortion and dynamic range, the ES9038 Pro Sabre DAC also offers the designer various digital filter options. Oppo's engineers have provided seven – five with 'fast' (sharp) roll-off characteristics and two with 'slow' (gentle) treble roll-offs. The fast filters – Brickwall, Linear Phase (LP), Apodising, Minimum Phase (MP) and Corrected MP – all offer a similar 53dB attenuation of stopband images with 48kHz media but while the Brickwall, Apodising and LP Fast show equal pre/post ringing on impulses and a flat response to 20kHz [red traces, inset Graph], MP Fast shows post-event ringing only (but with flat 20kHz response) while Corrected MP Fast trades some minor pre-ringing for a reduced post-ringing, albeit with a more severe -10dB/20kHz roll-off. The alternate MP Slow [black traces, above] and LP Slow filters have a poorer 14-18dB rejection of aliasing distortions with gentle treble roll-offs of -5dB/20kHz and -3.4dB/20kHz, respectively. I typically recommend 'slow' filter types for high (88.2kHz-384kHz) sample rate media where there's little impact in audioband response and where poor stopband rejection is arguably less important than the reduced time domain distortion [see Opinion, p103]. **PM**



UNIVERSAL PLAYER/DAC



ABOVE: Inputs include two HDMI (main and 'audio only'), coax/optical S/PDIF, Ethernet, USB-B (for PCs) and two USB-A 3.0 sockets for external HDDs. There are two HDMI outs, with 7.1 channel plus stereo RCA and balanced XLR analogue audio outs

The **Oppo UDP-205** makes a good fist of more complex fare too. *Brain Salad Surgery* [DVD-Audio, Rhino R9 75980], is a 96kHz/24-bit paean to keyboard chaos, rich in multichannel highlights. Heard in this mode, 'Toccata', a flamboyant interpretation of Albert Ginastera's 1st piano concerto, 4th movement, was awash with Carl Palmer's percussion. Synths imaged to the front of the listener before spinning off to the side. It was dizzying stuff, but the UDP-205 coped.

Back to stereo and the track still sounded like a Sylvester McCoy *Doctor Who* episode, but gained focus and found definition in those high electro frequencies. Indeed, this time around, Palmer's frantic fingerwork became needle sharp.

FUNKY 'N' FAT

But it was with 'Still... You Turn Me On' that the **Oppo** finally demonstrated its soul. The emotion in Greg Lake's vocal was intense, the funky wah-wah guitar accompaniment fat and unctuous. The UDP-205 encouraged you to focus on piano, synthesizer and harpsichord. It was gorgeous stuff.

Ultimately, it seems you can't beat simplicity to really emphasise the calibre of a player. *Keiko Lee Sings Super Standards* [Sony Records International SIGP28] is one of those cookie-cutter compilations seemingly so beloved of Japanese labels. But while this Super Audio CD may lack originality, it's immaculately recorded and mixed, and sounds as sweet as a maple syrup cocktail. It's totally what you might expect to hear in an up-market Tokyo hotel skyline bar.

The UDP-205 was completely at home here, sounding transparent and terrific. On 'Sentimental Journey' there was a dimensionality to the guitar picking coupled to tiny intakes of breath that had me wistful for a glimpse of the Tokyo Tower.

On a more practical level, the player's lack of integrated streaming services (Netflix, YouTube, Spotify Connect) seems a curious omission. It's not unreasonable to expect a Blu-ray player to come with a surfeit of streaming apps these days. While I can live without *House Of Cards* on tap, the lack of Tidal support seems particularly egregious.

On the other hand, file playback from a NAS drive proved consistently entertaining, particularly with DSD 64/128 (the UDP-205 also plays DSD multichannel). Mozart's 'Violin Concerto in D Major' by Marianne Thorsen & Trondheim Solistene (a download from 2L) enjoyed an airy live dynamic that proved truly engaging. Meanwhile, Magne Amdahl's 'Astrognosis' performed by the Norwegian Radio Orchestra (44.1kHz/24-bit, FLAC), read from a USB drive, was similarly expansive. ☺

HI-FI NEWS VERDICT

This multimedia player combines extraordinary versatility with an enviable specification. Its predisposition to hard-edged detail can occasionally be at the expense of easy-going musicality, but you'll have to pinch yourself that this is in fact a Blu-ray player when you find yourself lost in a DSD-induced reverie. It's unapologetically feature-laden, yet still has a purity of purpose. A real feat when you think about it.

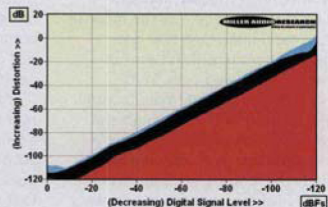
Sound Quality: 86%



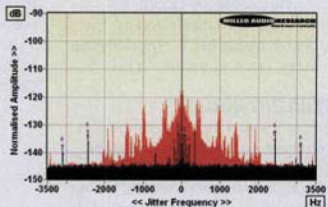
OPPO UDP-205

Comparisons with **Oppo's** spectacular BDP-105EU [HFN Jan '13] are instructive, for the UDP-205 is built along similar lines with split audio PCBs: one multichannel, one stereo and both driven by an 8-channel, 32-bit Sabre DAC. Four years on, however, and the BDP-105EU's ES9018 is surpassed by the ES9308 Pro DAC in this '205 player. In practice, the (balanced) output is fractionally lower at 4.25V but the 97ohm source impedance and wide 116dB A-wtd S/N ratio are unchanged. Distortion, too, remains vanishingly low and is as likely limited by the analogue output stage as the DAC itself. With 24-bit inputs (USB or DVD media) THD is so low over the top 10-20dB of its dynamic range that it's almost below the chart [see 1kHz/48kfs, red trace, Graph 1], with a minuscule 0.00002% through its midrange at -10dBfs. Even at 20kHz/-10dBfs, distortion is just 0.0001% with 24-bit sources or 0.0003% with CD.

Jitter is lowest overall via SACD at just 45psec [black, Graph 2] but rather higher - though not especially 'high' - via USB, S/PDIF and DVD at 150-170psec, the complex jitter pattern [red, Graph 2] not dissimilar to that we saw with the HA-2 SE portable player [HFN Dec '16]. The frequency responses depend entirely on your choice of digital filter [see boxout, p51]. Brickwall and Corrected MP Fast cut off very steeply to reach -14dB/45kHz/90kHz and -23dB/45kHz/90kHz while MP Fast and LP Fast are almost entirely flat at -0.1dB/45kHz/90kHz and -0.4dB/45kHz/90kHz, all with 96kHz and 192kHz media, respectively. MP Slow and LP Slow are -7dB/45kHz/90kHz and -5dB/45kHz/90kHz. SACD has a progressive roll-off of -0.5dB/40kHz, -2.8dB/60kHz, -8.5dB/80kHz and -16dB/100kHz. PM



ABOVE: THD versus digital level over a 120dB range comparing 48kHz/24-bit USB and S/PDIF (1kHz, red) with CD (1kHz, black; 20kHz, blue)



ABOVE: High resolution jitter plots via USB (48kHz/24-bit, red) and native SACD (black with markers)

HI-FI NEWS SPECIFICATIONS

Maximum output level/Impedance	4.25Vrms / 97ohm (Balanced)
A-wtd S/N Ratio (CD / SACD / USB)	115.5dB / 115.4dB / 115.5dB
Distortion (1kHz, 0dBfs) -30dBfs	0.00004% / 0.00070%
Distortion & Noise (20kHz, 0dBfs) -30dBfs	0.00023% / 0.00072%
Frequency response (20Hz-20kHz/90kHz)	+0.0dB to -0.02dB/-0.2dB
Digital jitter (CD / SACD / USB)	245psec / 45psec / 155psec
Resolution @ -100dB (CD / SACD / USB)	±0.1dB / ±0.1dB / ±0.1dB
Power consumption	26W (1W standby)
Dimensions (WHD) / Weight	440x127x419mm / 18.4kg

