



Blu-ray triumphant

Panasonic's latest evolution of Blu-ray is here – only a matter of weeks since the last one. **Chris Jenkins** is knocked out by the BD50's swift successor



We're getting used to technology products having a reduced shelf-life – but six to eight weeks? That's about how long Panasonic's DMP-BD50 Blu-ray player lasted before the announcement of its fourth-generation successors, the DMP-BD35 and DMP-BD55.

And the amazing news is that the latest models manage to surpass the performance of both of those earlier machines. Squeezing more BD power from a slimmer chassis and even improving on their regular DVD

performance. It's apparent that the BD50 was intended to grab an initial handhold in the increasingly competitive BD Profile 2.0 market, while Panasonic's boffins beavered away at producing a new slimline BD drive.

Launched at the recent IFA techfest, the latest players have nigh-on identical specs except for the BD55's analogue audio outputs, and coaxial digital audio output, in addition to the optical output. The other difference to note is that the BD35 can claim to be the world's

Plain fascia: The disc transport is centre-mounted and the power button is on the top left

thinnest Blu-ray player at just 49mm high. This is partly down to the latest iteration of the UniPher chip, Panasonic's own LSI which is claimed to be the first use of 45-nanometer processing in a consumer product. Mind you, the BD55 we're focusing on here is a relatively chunky 55mm, presumably to accommodate the additional 7.1 analogue sound outputs.

Black beauty

The BD55 is a discreet black design, with sturdy metal construction



The remote control is a familiar and comfortable design, logically laid-out with central transport buttons

and a slight mirror-finish to the front detailing. Around the back are the mains lead connector, fan outlet, and a comprehensive selection of outputs: HDMI v1.3, component video, composite video, optical and coaxial digital audio, and 5.1 multichannel analogue audio. There's also a stereo audio output pair which doubles as the multichannel surround back outputs, making this the first Blu-ray player I've seen with 7.1-channel audio outputs. Naturally, the player can output both Dolby TrueHD and DTS-HD MA as a bitstream as well as decode them internally into LPCM.

Both the BD35 and BD55 are BD-Live compatible, and so, of course, have LAN ports for connection to networks, allowing users to download images, subtitles and other data, participate in interactive and multiplayer games and access other Profile 2.0 gubbins. This will also permit updating of the player's operating firmware via the network. The players' SD memory card slots must be used for BD-Live downloads, but the SD reader can also display JPEG format digital images at up to 1920 x 1080 resolution.

The provision of 7.1 analogue audio outs on the DMP-BD55 fulfils a niche requirement of some users who would like to connect analogue outputs to their amplifiers, but so far have been limited to 5.1 channels by the spec of previous BD spinners. The upgrade has been achieved by the obvious step of making the stereo audio outputs switchable to serve as the additional two channels; **if you can manage all the interconnects, you should now be able to stream glorious 7.1 analogue sound to the multichannel inputs of your amp.**

The majority of home cinema fans won't need the DMP-BD55's 7.1 analogue outputs, but for the few who do, they will be a welcome feature and possibly a sale clincher. No other player on the market offers this feature so far, though you can bet there will be others soon – Sony's forthcoming S550 is the front-runner.

Both players support 192kHz/24bit audio conversion, and have a range of audio processing modes including dialogue enhance, night surround mode and dynamic range compression.

AV/CV

Product:
Profile 2.0
Blu-ray player

Position:
Top-of-the-range
replacement for
BD50

Peers:
Sony
PlayStation 3;
Pioneer LX70A;
Sony BDP-S500

Disc format compatibility is fairly wide, including DivX 3/5, MP3, DVD-RAM and AVCHD, though S/VCD and DVD-RW VR are not supported, and neither are Super Audio CD or DVD-Audio. The omission of the latter two is a real shame, but something we're getting used to on Blu-ray players.

Performance props

Panasonic's main claim for the BD55's picture performance is based around the PHL Reference Chroma Processor Plus video processor. Designed to create colours faithful to the movie original, its the culmination of years of cooperation between Panasonic's Hollywood Laboratory and the Hollywood studios. Future-proofing is provided by support for both DeepColor and x.v.Color.

It won't come as much surprise, considering the impressive performance of the BD50, that the BD55's Blu-ray images are stunning.

I tested it with a range of Blu-ray discs, including *Jerry Maguire*, *Horton Hears a Who* and *The Omen* (2006).

The first thing to note was the quality of colour handling; on *Jerry Maguire*, realistic skin tones capped a convincingly smooth treatment >

**Bare backside:**

The analogue stereo outputs can be used to provide additional channels in 7.1 mixes

of scenes in offices and airports. Switch to *Horton Hears a Who*, though, and the psychedelically bright colours of the animation leap out without any suspicion of over-blown colour boosting.

Could the BD55 also handle dark scenes? Judging by *The Omen*, which is all night scenes, driving rain and darkened churches, the answer is 'yes'. Despite the gloom, there is plenty of detail in the darkness, and the laser sights of the SWAT team in the climactic scene burned through without degrading shadow detail.

General levels of detail are extremely high, with no sign of fuzz. I could see every whisker of Tom Cruise's designer stubble.

There's no doubt that the BD55's chroma processing is doing its job, but if we had any criticism of the BD50, it was that treatment of DVD playback was unexceptional. So has this aspect been tackled on the BD55?

Our Tech Labs came up with some interesting figures for analogue video output. While results were pretty much comparable to those of the BD50 in most respects, there were improvements in some significant areas; video jitter is down, chroma amplitude modulation down. Most significantly, though it marginally failed the HQV Benchmark 'jaggies' test, was that it passed the text crawl test, which the BD50 failed.

Standard-def

Testing with the DVD of Arrow Films' edition of *Caligula* proved illuminating. The BD55 couldn't do much about the graininess of the

original print, but upscaling to 1080p did bring out some detail. Similarly the EIV edition of the Director's Cut of *Dark City* showed a little more detail when upscaled, and the BD55 certainly brought out all the detail in its gloomy street scenes. It seems that **Panasonic has certainly responded to criticism, and come out with a Blu-ray player which is also an above average DVD player.**

Of course, audio performance will depend largely on the sound system you're using, but on my reference system the BD55 really shone. The soundtrack of *The Omen* had me jumping out of my skin, with the doomy score, cracking of thunder and shock moments superbly handled with a huge dynamic range and strong positioning. My music demo disc of choice, the Blu-ray audio *Divertimenti* by Trondheim Solitene on the 2L label, delivered a rich and involving sound with every nuance of the performance brought out by the player's uncoloured audio processing. Standard CD playback impressed too, with our Linn Records edition of *Fiddler Tam* by the Concerto Caledonia delivering a rambunctious performance.

The final standard?

In my colleague Jim Hill's review of the Panasonic DMP-BD50 in HCC #158, he said 'I think I speak for all hardcore home cinema fans in saying that this is the dedicated Blu-ray player the world has been waiting for.' Well, right sentiment, Jim, but as it turns out, wrong player – Panasonic's DMP-BD55 is really the business ●

→ Specifications

Video upscaling: yes Up to 1080p 24
Multiregion: no Region B (BD); R2 (DVD)
HDMI: yes V1.3
Component: yes 1 output
Multichannel phono audio: yes 7.1-channel
Digital audio: yes coaxial/optical/HDMI
SACD/DVD-A playback: no
Dolby TrueHD/DTS-HD/DTS-MA decoding: YES/YES
Bitstream output: YES
Profile 2.0: yes BD Live function via Ethernet
Dimensions: 430(w) x 55(h) x 249(d)mm
Weight: 2.6kg
Also featuring: SD Memory card slot, VIERA link for control of other Panasonic equipment

→ Tech Labs**DVD playback**

Audio jitter: 178.8ps 1 2 3 4 5
Video jitter: 4ns 1 2 3 4 5
Video S/N ratio (interlaced component Y): -74.8dB 1 2 3 4 5
Chroma AM: -73.5dB 1 2 3 4 5
Chroma PM: -64.5dB 1 2 3 4 5
Chroma crosstalk: NA 1 2 3 4 5
Response @ 5.8MHz (component, interlaced): -0.52dB 1 2 3 4 5
HQV Benchmark Jaggies test: FAIL
HQV Benchmark Text Crawl test: PASS

Panasonic's successor to the short-lived DMP-BD50 features the third-gen UniPher processor. The player delivers excellent audio performance and very good picture. The only failure in our tech testing was on the HQV 'jaggies' test, and even that was marginal

**HCC VERDICT**

Panasonic DMP-BD55
 £400 Approx

Price check: www.techradar.com

Highs: BD Live compatibility; full DTS-HD MA and Dolby TrueHD support; 7.1 audio outputs; improved DVD playback
Lows: Not the prettiest deck, er...

Performance: 1 2 3 4 5

Design: 1 2 3 4 5

Features: 1 2 3 4 5

Overall: 1 2 3 4 5