

The Good Life

Anyone with £8,000 to spend on a digital disc player finds themselves in a most pleasant predicament, thanks to the wealth of superb hardware on sale. Meridian's 808i is one of the most interesting options; a DVD-Audio compatible CD player complete with sophisticated digital preamplifier built in, it's a natural partner to the DSP series of digital active loudspeakers. But how does it do as a standalone source component? Channa Vithana finds out...

Meridian can be proud of its history of illustrious digital disc spinners. The evolutionary MCD and MCD Pro were at the dawn of commercial Compact Disc in 1984. Then in 1985 arrived the superb 200/203 series, which remains my favourite Meridian in pure design idiom. With its confidence-inspiring and gorgeously tactile fully opening transport, Meridian claimed invention to the first separate transport and DAC CD player. The 200 series initialised the distinctive transport in a drawer philosophy for Meridian CD players that continued until the demise of the 506/508 series in the nineties which gave way to the current models that use a DVD-ROM drive hidden behind a flap.

Before you is the latest in the line, an anniversary 808 series machine. Actually, it's available in two versions: the £7,195 808 CD player with selectable fixed or variable output and the £8,250 808i CD player preamplifier complete with both analogue and digital inputs. The latter (reviewed here) is described as

encompassing "the highest-quality CD playback available anywhere, at any price"! It features Meridian's favoured DVD-ROM drive as the transport, which for me is a little disappointing considering Meridian's own history in beautifully appointed CD transports.

Its ROM drive, says Meridian, "allows multiple passes to be made, ensuring that the correct data (is) recovered from the disc and improving Compact Disc's error-correction a hundredfold. It also allows complete buffering of the recovered data. To ensure the lowest possible jitter, (the) 808 incorporates three buffers, two of which are used as FIFOs. By the time the data is passed to the DACs or the digital output, the jitter is incredibly low

— in fact (the) 808 has the lowest jitter we have ever measured on a CD player: around 90 picoseconds, with the jitter spec-trum held below 0.1Hz".

'Resolution Enhancement' digital signal processing is used, in which the original 44.1kHz, 16-bit audio is upsampled to 176.4kHz, 24bit in one of three 150MIPs (million instructions per second) processors operating with 48bit internal precision. "This is 'true' DSP upsampling, unlike anything else available in the marketplace", says Meridian. The 808 DACs are said to be multibit oversampled delta-sigma D/A converters, combined with a matching proprietary analogue output stage. Internal construction is much like a PC



MUSIC USED:

Marie-Claire Alain 'Bach Organ Masterpieces Vol.2' (1994/2003)
 Ysaÿe/ Zehetmair 'Sonatas Pour Violin Solo' (2004)
 Depeche Mode 'The Singles 86>98' (1998)
 A-ha 'Memorial Beach' (1993)
 Bee Gees 'Number Ones' (2004)
 AC/DC 'The Razor's Edge' (1990)
 Nikolaus Harnoncourt 'Bach Mattheus-Passion' (2001) DVD-A
 Steve Stevens 'Flamenco A Go Go' (2001) DVD-A
 REM 'In Time, The Best Of 1988-2003' (2005) DVD-A

tower but arranged on its side. The internal components are slotted like cards into a motherboard. These separate cards have their own power supply and buffering, and comprise: computer, decoder, FIFO buffers, DSP upsampling, D/A conversion, digital output, analogue input, analogue output and digital input. Meridian says audiophile-grade capacitors are used throughout, and each component – even each resistor – has been selected for its sonic contribution. The PCBs are all multilayer, many of them using 6-layer technology for the lowest noise and jitter and for optimum grounding.

The Meridian's internal chassis uses finely crafted and extruded bracing plates which form a skeletal frame along with the inner sidewalls and base plate. Within this frame and in-between two bracing plates at the rear are slotted the various cards. To the right of the rear panel is an isolated and sealed compartment for the IEC mains input and power switch. Then the ROM drive is located at the front with the power supply and display. The inner chassis/frame is sealed with a top layer.

Meridian has accomplished an exceptionally difficult task in designing an attractive 480x175x411mm outer packaging as it is, internally, in essence, a substantially constructed and sophisticated PC tower. Unlike almost all PC towers however, the

Meridian in pure design language, due to its outer surfaces, is beautifully composed and is a lasting design which gets better the more one looks at it. It consists of two finely crafted L-section extruded metal panels on either side which have a series of ribbed details running along their outer sides; they are attached to the inner chassis via attractive hex head fixings.

The front is a substantial and solid one-piece component, centrally framing the display, upper flap, and disc-loader drawer flap and control buttons. It is finished in similar satin silver to the side panels. The complete casework is very solid overall and appropriately confidence inspiring. The glass top and various panels fit together very well, and a gentle finger-knuckle rap showed a well-damped structure.

The display, buttons and flaps are finished in gloss, which complements the glass top surface expressing sophisticated reflectivity. There is also

a black finish option.

The ergonomics, user interface, display legibility and uplit Meridian MSR+ remote are all first-rate communicative instruments and a delight in use and function. The one area in build quality for the £8,250 Meridian that should have been better is the material and moving parts of the disc-loading drawer flap, top flap and operation buttons. They are acceptable, but not flawless in fit and operational feel – as on the £9,000 Esoteric X-01 SACD/CD or the £6,190 Chord Blu/ Dac64 transport/ DAC – which is mandatory at this price.

For example, firstly, the operation buttons though wonderfully ergonomic, are slightly flimsy in comparison to a sub-£1,000 Marantz universal player's controls, let alone the Esoteric X-01 or Blu/Dac64.

Secondly, the ROM drive disc-loader drawer is noisy when it opens and shuts. It is not the worst sounding ROM drive but even a



much cheaper £895 Unison Research Unico CDP CD player uses a smoother and silent ROM disc-loader in comparison...

The upshot of having Meridian DAC and ROM components in this player is that it can read and play DVD Audio discs in stereo. The display stated 192k 24Bit MLP DVD-A when I loaded 'In Time, The Best Of 1988-2003' by REM. Additionally the Meridian read 48k and 96k on the other DVD-A discs used. This is a great feature!

On its rear panel, the 808i has a generous six analogue inputs, three coaxial digital inputs, two optical inputs, and both balanced XLR and phono stereo analogue outputs. There are two digital coaxial outputs; one is an auxiliary which can handle 44.1kHz and the other labelled MHR (Meridian High Resolution) can do 44.1kHz or upsampled 88.2kHz and is suitable for connection to Meridian's beautifully designed high-end DSP active speakers. There are a series of communication / software upgrade interfaces such as Meridian comms/RS232/trigger sockets, and IEC mains socket plus switch. There also appears to be some extra empty card slots possibly for future expansion or upgrades.

SOUND QUALITY

Playing 'Bach Organ Masterpieces Vol.2' brought on a deep presentation with the Meridian; I found the unravelling of phrasing most enjoyable. Beyond immediacy, as the organ pieces were in full flow, I could distinguish a small but discernible stridency on the higher frequencies as they flared out when the organ was in its most powerful stride. The resolution of the organ was good, but the musical timing which can importantly convey the emotional impact of struck keys was a little minimised. Thus notes were generally well placed but slightly awkward which upset the flow of the organ pieces.

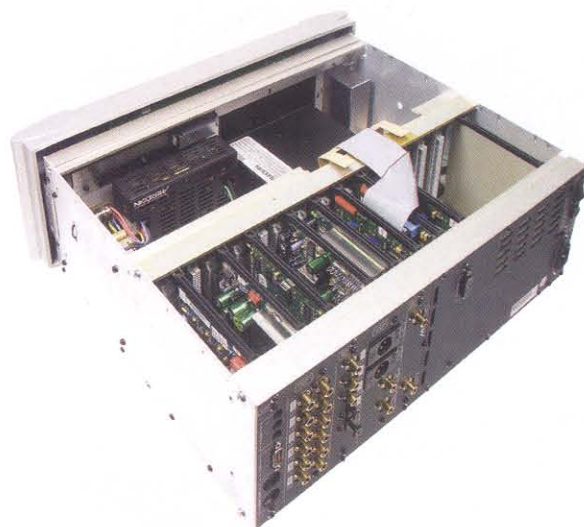
On the Ysaÿe / Zehetmair 'Sonatas Pour Violin Solo', the violin had plenty of attack, with some nicely revealed phrasing. The timbre of the violin was quite delicate, with some good multilayered harmonics that helped to express the emotional feel

of the solo. When the violin went into quieter, darker passages (the recording went into near silent parts also) the Meridian was very good at detail retrieval. An exceptionally quiet background enabled portrayal of low level violin detail with clarity. There was some higher frequency stridency when the more demanding violin notes were rendered though.

The grandly distended 'Never Let Me Down Again' by Depeche Mode from 'The Singles 86>98' sounded very good overall through the Meridian. It was able to express the melodic and rhythmical details rather well – which procured a sophisticated feel. Dave Gahan's vocals were forward in placement to the musical structure but sounded excellent. The backing vocals were conveyed with clarity. The instrumental separation was good, giving a sophisticated feel. The higher frequencies and midrange were the most prominent aspects to the Meridian and although a little brightly lit, 'Never Let Me Down Again' did not go into similar stridency as on the Bach and Ysaÿe / Zehetmair pieces. The musical timing was good, but could have been better, to bring the overall sound into more of a balanced stance.

The 1993 recording of 'Memorial Beach' by A-ha is a thing of aural and melancholic beauty. So, the instrumental and vocal separation on 'Locust' was good with clear enunciation of the different musical instruments and Morten Harket's vocals. However the atmospheric noir-ish nature of the song was a little minimised because the depth and spatiality required for 'Locust' did not seem to come forth as readily as it should. Bass dexterity and extension, while easily recognisable as musical, was not as expressive in timbral acuity as it could have been. Structurally however everything was held together well by the Meridian and 'Locust' subsequently had good musical timing.

From the mid-seventies, 'Jive Talking' by the Bee Gees is a superb recording and it sounded nicely layered and suitably funky via the Meridian. The main vocals were really good as they are sung in a hushed style which the Meridian ably extracted and revealed. The melodic



backing vocals were timbrally good but somewhat strident and more prominent within the mix. The bass was appropriately nimble and its dextrous quality was very good.

Playing AC/DC and their 'Thunderstruck', I was pleasantly surprised by the rendering of Brian Johnson's vocals. They were richly hewn, and agreeably growling instead

THE EDITOR SAYS:

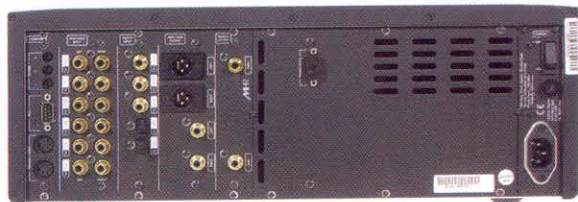
Having lived with the Meridian 808i for the best part of six months now, initially with the DSP-7000 active digital loudspeakers partnering and then latterly as a digital preamp, I can only express my profound admiration for such a well integrated digital source/preamp package. But still I have qualifications.

First, that sense of 'hewn from solid' that you get from Japanese high-end simply isn't there; Channa is spot on when he says that the disc drawer simply doesn't 'feel' right for a product at this price. Although the Meridian is a beautiful visual design, it doesn't work so well on a tactile level; it feels less expensive than, say, Sony's SCD-XA9000ES at £1,600.

Second, although I felt its DAC section to be superb (DVD-Audio has rarely sounded this convincing, and embarrasses any Japanese design I've heard), its CD abilities aren't much above most £2,000 machines. Certainly, a £5,000 Naim CDX2/XPS2 would surpass it, I feel. The reason, I believe, is the transport. It is good, but it's a DVD-ROM, and when you put it against an excellent, bespoke Red Book CD transport, you realise that no matter how cleverly Meridian's engineers have re-clocked the data, it's just not as good.

I can see why Meridian has gone for a DVD-ROM mech – what with the company's avowed enthusiasm for DVD-A and its upgrade potential into a high end DVD video machine – but if it's CD and CD only that you're interested in, than this introduces compromises...

Meridian would argue that this is to miss the point, that it's a 'do-it-all' machine that integrates seamlessly with their DSP series of active digital speakers. I'll happily concede this. It has been designed to work within a Meridian system. DP



COMPARISON

MERIDIAN 808i VS. CHORD BLU/DAC64

On the 'Bach Organ Masterpieces Vol.2', the organ was of a very high resolution through the Chord Blu/Dac64 in comparison to the Meridian. Additionally the subjective stridency prevalent on the Meridian was almost completely eradicated. Consequently the timbre to the higher frequencies was superb. The Meridian was subjectively superior with detail retrieval though.

The musical timing was superb on the Ysaÿe/Zehetmair 'Sonatas Pour Violin Solo' through the Blu/Dac64. Violin through the Blu/Dac64 had delicacy and attack within the recording. The subjective stridency of the Meridian was absent.

On 'Never Let Me Down Again' by Depeche Mode, the Blu/ Dac64 was preferable I felt, even though the Meridian put in a very good performance. There was superior musical timing, excellent instrumental separation (equal with the Meridian), vocal expressiveness and an effortless flow of driving rhythms.

AC/DC's 'Thunderstruck' was stunning via the Blu/ Dac64 with widescreen dynamism and powerful rhythmical propulsion. There was excellent musical timing which led to a beautifully balanced stance that enabled 'Thunderstruck' to sound enjoyably rock and roll. The rhythm and lead guitars were also superior to the Meridian as almost all of the subjective stridency was absent. However the Meridian was still superior with Brain Johnson's vocals.

of harsh or grating. For instance he can turn his vocals quite nicely, from semi-rap to scream and the Meridian revealed this rather well. The driving rhythm was also good, with decent impact. However the main high-frequency lead guitars sounded somewhat strident.

Things got dramatically better when I connected the Meridian directly to the power amplifier and switched it to its excellent, smoothly proficient variable output volume control (through a few simple menu steps). Here the resolution gained immensely with a much more radiant sound, improved spatiality and vocals gaining better definition. The low-frequencies timed well, within the structures of the music. This was a wholesale improvement over the fixed output. There was still a trace of hardness to the higher-frequencies though. However, this improved performance with direct connection to a power amplifier does show the potential of the 808/808i connected to a complete Meridian DSP active speaker system.

I listened to the 808 as a DAC, by connecting it to a classic TEAC P30 transport and the difference was not subtle. The Meridian using its own transport in comparison sounded diffuse in the low frequencies and slightly hard at the upper frequencies. With the P30 transport connected, the sound became more dimensional, and the whole structure of the music was underpinned with an enjoyably tuneful solidity that brought focus to better musical timing, weight and definition in all areas of the Meridian's performance. This showed that while the ROM transport was lacking slightly, in comparison its DAC implementation was much better.

CONCLUSION

Subjectively I found the Meridian 808i had a superb DAC and (inclusive of the cheaper 808) an excellent, smoothly graduated variable volume control. Both of these qualities bode well for its analogue and digital preamplifier section which along with the generous set of inputs would make a technologically elegant hub.

The performance of the 808i with its own volume control significantly bettered its fixed output (when directly connected to a power amplifier). This also hints at the potential of an all Meridian system with the 808/808i and a set of Meridian DSP active speakers. So it is understandable if Meridian would prefer that most, if not all 808/808is would be connected this way.

However, at this very high-end price level and considering Meridian's "808 Signature Reference Compact Disc Player" designation, it must perform brilliantly as a standalone player. And as such, the Chord Electronics Blu/Dac64 transport and DAC at a lower £6,190 price outperformed the Meridian (even when directly connected to a power amplifier), I felt.

The key criticism is the ROM drive; this was the weak link on CD. It is very good by any standards, but at this price it should be nigh on peerless even against the best money

can buy. However, the Meridian does play DVD Audio in stereo and without the need for an annoying screen if you simply want to listen to music, and here it was preferable. The Meridian 808i's strengths are its benign tonality and detail retrieval on and with DVD-Audio. Of course, it is also ergonomically superb and its exterior design language is first-rate, procuring an enduringly beautiful piece of industrial design that will appeal to Meridian's discerning and loyal patrons.

MEASURED PERFORMANCE

Our frequency response plot of this CD player show it has a high pass filter that removes frequencies below 10Hz. In the unbalanced impulse analysis this adds a slight +0.1dB lift below 200Hz. The effect isn't so obvious via the balanced output, but the filter response is quite clearly shown in our analysis. At high frequencies the 808 is completely flat, reaching up to 20.2kHz before the anti-alias filter takes effect. The effect is small but may just be perceptible as slightly livelier bass than is common.

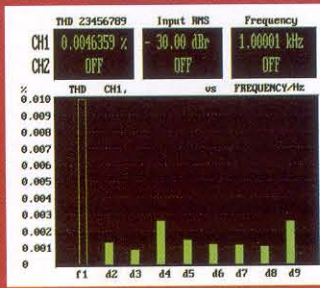
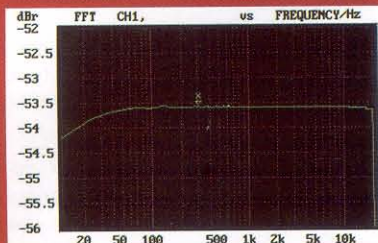
Distortion levels were similar via both balanced and unbalanced outputs, but the former gave slightly better results, as it should. The 808 was up with the best, providing excellent results at all signal levels. The balanced output managed to yield an EIAJ dynamic range value (113dB) that was better than any player we have tested - an expected benefit of proper balancing.

Jitter hovered at a miniscule 5ps across the audio band.

Output was high at 2.4V, and very high via the balanced output at 4.2V.

This is a player to be used via its balanced outputs, to gain benefit of cancellation of common mode signals. Then it measures slightly better than any other player available. NK

Frequency response (-1dB)	
CD	8Hz - 20.2kHz
Distortion	CD
0dB	0.001%
-6dB	0.001%
-60dB	0.18%
-80dB	4.4%
Separation (1kHz)	102dB
Noise (IEC A)	-106dB
Dynamic range	113dB
Output	2.4 / 4.4V



VERDICT

Quite possibly the best integrated disc player/ digital preamplifier money can buy in both style and sonic terms - but less convincing as a standalone Compact Disc spinner at its rarefied price point.

MERIDIAN 808i £8,250
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FOR

- excellent ergonomics
- DVD-a sound-quality
- aesthetics and remote

AGAINST

- CD sound quality
- better connected direct
- less than flawless build