Meridian 563

VERDICT

RECOMMENDED HI-FI CHOICE MAGAZINE

- Sustains a very composed sound without losing sight of the music's natural energy.
- Lacks the full brilliance and sheer expressiveness of the short-lived 206 CD player.

£695.00

SOUND QUALITY ■■■■□

VALUE FOR MONEY ■■■□□

Just seven issues ago we suggested that, come the day of reckoning, Meridian's *263* DAC would be the first to go. Well the revolution has come, gone and the dust settled to reveal an entirely new range of digital electronics. Foremost among them is the *563* DAC, resplendent in its chassis of alloy, moulded plastic, black-textured enamel and glass.

Wafer-thin keys select its single Toslink (optical), three coaxial (electrical) and balanced XLR (AES/EBU) digital inputs while an additional key inverts the absolute phase. This concession to tweakers was never available on the old *263*.

Inside we find the same Crystal receiver and two-stage phase locked loop used in the *263*, designed to clamp down on digital jitter before the re-clocked data reaches the DAC itself. And here Meridian has opted for not one but two Crystal DACs, one chip per channel delivering what Meridian promises is 19 bits resolution.

Just as importantly, Meridian has finally seen fit to redress the incompatible 45-55ohm impedance of its digital inputs. Today's *563* has an input impedance far closer to the agreed standard of 75ohm, ensuring this DAC will happily marry-up with all CD transports and not just those bearing the Meridian logo.

Sound quality

Peppered with definition and detail, the sound of the Meridian *563* appears open and smooth but also ever so slightly forward. Introducing it to the *CD-52II* brought vocalists out of the mix with great conviction, enhancing the breathy quality of Lisa Stansfield as eloquently as the restrained but husky intonation of Sting's vocals.

The sound was always persuasive yet, when the mix became busier, its harmonious clarity was compromised as strings, percussion and vocals grew steadily more confused.

This one criticism was countered by the Teac *P-700* which kept a firmer grip of the digital reins. There was still a feeling of anxiety with the busiest sections of music but its sound now converged into a smaller soundstage without the disruption suffered by the *CD-52II/563* pairing. Here at least the influence of this superior CD transport was apparent in the secure and deep soundstaging, a solidity that enhanced the rumble of classical drums without muddying the overall picture.

Conclusion

The Meridian *563* is not the costliest DAC in our survey but at £700, and with a performance that's well-behaved but occasionally lifeless, it's not a viable upgrade for every budget CD player. The *563* comes into its own with a high-calibre standalone CD transport. Therefore, for this quality alone, the new *563* earns both our praise and Recommendation.

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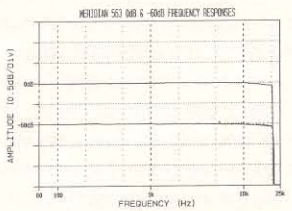
LABORATORY REPORT

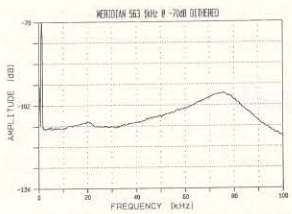
Both the 263 (issue 120) and 563 use the same Crystal CS8412 interface chip and similar Class-A analogue output stages. Yet the 563 features a differential pair of CS4328 DACs in an attempt to reduce common-mode noise and distortion while improving its low-level linearity.

In practice, the maximum error has reduced from -1.8dB to just -0.7dB over a full 100dB range. Yet even with a 4dB reduction in noise, the overall signal-to-noise ratio of 100dB suggests a dynamic range closer to 17-bits rather than 19-bits. Distortion, meanwhile, has also dropped from 0.007 to 0.0022 per cent at 20kHz — a world's best for Crystal Bitstream technology.

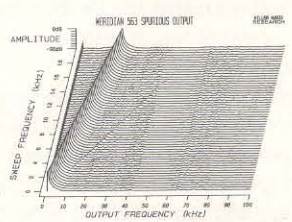
		20Hz	1kHz	20kHz
Channel Balance		0.25dB	0.25dB	0.23dB
Channel Separation		125.8dB	121.6dB	110.5dB
THD vs Level,	0dB	-101.0dB	-99.4dB	-92.9dB
	-30dB	-93.8dB	-81.5dB	-68.9dB
	-60dB	-57.4dB	-51.2dB	-39.5dB
	-80dB	-27.2dB	-29.3dB	-18.7dB
Dithered,	-90dB	-17.0dB	-19.2dB	-10.4dB
Dithered,	-100dB		-14.2dB	
Dithered,	-110dB		-5.90dB	
Resolution @	-60dB		-0.01dB	-0.01dB
	-80dB		-0.15dB	-0.13dB
	-90dB		-0.45dB	-0.65dB
	-100dB		+0.05dB	-0.05dB
Peak Output Level,	L		2.252V	
	R		2.188V	
Relative Output Level			+0.91dB	
Output Impedance			46.1ohm	
Radio Frequency Spuriae				34mV @ 11.3MHz
0.33Hz Noise Modulation				+2.5dB
CCIR IMD, 0dB				-102.5dB
Suppression of stop-band IMD				97.5dB
De-emphasis Accuracy,	1kHz			-0.02dB
	5kHz			-0.03dB
	16kHz			-0.05dB
S/N Ratio (A-wtd),	w emp, 0LSB			104.4dB
	w/o emp, 0LSB			99.8dB
	w/o emp, 1LSB			99.8dB
Digital Input Impedance (1-20MHz)				72-69ohm
Digital Input(s)				Coaxial + Toslink + XLR (AES/EBU)
Serial Number				100232



A perfectly flat and ripple-free response despite 64 times oversampling.



The practical dynamic range is stretched by just 2dB over the 263 (issue 120).



As promised — even-order distortions are all but extinguished.