



*The most affordable
Meridian amplifier ever
looks like a modern
classic. Is it?*

by **PETER J COMEAU**



MERIDIAN 551

Choices, choices...With the alternative of investing in a separate pre- and power amplifier, is there any reason to consider an integrated amplifier if you are thinking of spending £700-800?

It depends what matters to you most. The 551 is Meridian's cheapest amplifier, so if you want Meridian quality, here's your starting point. If you already own Meridian components, perhaps from the 500, 600 or 200 series, and like the idea of full remote control integration, you have to choose the 551. And if elegance is your top priority, the 551 is the neatest, slimmest addition to the system, capable of providing nigh on 60W of power to your speakers and able to accept every audio source imaginable.

Like all modern Meridian components, the 551 gives you more than just input switching and a volume control. And instead of the conventional control knobs, there's an array of vertical push buttons linked to a fascia display to show what's going on. These are part of a totally flexible, user-configurable array of input and output options including individual level adjustment for each input, separate Listen and Record source selection, headphone output and speaker mute, pre-amplifier output and digital communications for other 500 or 200 series components.

There are no individual input switches on the front panel. Instead, a Source button cycles through each of the six inputs, and you can choose

which label you want the display to show for each source. This may seem a lengthy way to find your required signal input, but if you are using other Meridian components then it makes sense to buy the relatively cheap and well laid out MSR System Remote controller which transfers input and control to one of twelve sources selected via its own labelled button. Adjusting input gain for each source also means that you can switch inputs without sudden jumps in listening level.

Confused by all these options? You needn't be. Even if your dealer doesn't set it all up for you, which he probably will, there are six default Types you can choose between to configure the settings automatically to match the requirements of your associated equipment.

TECHNOLOGY

Meridian's aluminium, plastic and glass casework looks particularly clean and self effacing in domestic surroundings. A small, yellow, alphanumeric display above the control buttons shows two letters to denote the selected input, followed by two numbers for the volume level. The factory default settings for input gain enable full output from a CD source with the volume advanced to 99, but you can adjust input sensitivity over a 15dB range for all inputs. The Off button switches the unit to standby, from which mode the volume is recovered at 65 so as not to blow your ears off by mistake. A Copy button selects the

source to be sent to the single tape output independently of your listening mode. Speakers can be switched off via their own button while the headphone output, unfortunately located on the rear panel, is permanently powered. In addition the whole system can be muted to silence from the front panel or system remote.

Four circuit boards carry the pre-amplifier section, based just inside the rear panel for the shortest signal path, two power amplifier channels, mounted on the side heatsinks, and the front panel switching and logic. These surround a 300VA toroidal transformer with multiple secondary windings for each power amplifier channel and the pre-amp, so each section has its own power supply. Individual bridge rectifiers are placed directly on the power amp boards along with 6,600uF of reservoir capacitance feeding complementary bi-polar output devices; van den Hul cabling then takes the output to in-line protection fuses included in the feedback loop and then to output chokes.

The pre-amplifier section is largely IC-based, with surface mount CMOS input switching. Space is allocated on the main circuit board for an optional plug-in module which provides m-m or m-c cartridge matching on the first input, but as standard reverts to a line input (labelled LaserDisc on the system remote). All inputs and outputs are gold-plated; the sturdy speaker sockets will accept 4mm plugs as well as bare wires.

For the main listening sessions, the 551 was hitched up to ATC SCM20T speakers using Audioquest cable, and source signals taken from

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Meridian's 500/563 CD transport/DAC combination via vdH The Second interconnects and a Pioneer PD-S802 CD player with Chord Chameleon cables.

SOUND QUALITY

There Is Sweet Music (Collegium COLCD104), sung by John Rutter's Cambridge Singers, was the first album to show the 551's attributes to great advantage. Every word was clearly enunciated, and the complete vocal range was rendered with an entirely natural quality. Sibilance, too, was held in check and brilliantly associated with each voice, all this being part and parcel of a well laid out and highly stable soundstage. Particularly noticeable were the silences between lines and verses, a feature which helped define the flow and tempi of these finely-structured choral pieces. (If this sounds stupid to you, consider only that music is made up of notes, bars and rests, and that these last are crucial to musical expression. All too often in hi-fi reproduction the silence is disturbed by noise, so an amplifier which can stay clean after the passing of a transient and show the decay of a tone accurately will better communicate the performance to the listener.)

Orchestral favourites showed the 551 to have both a wide bandwidth and dynamic range, driving the ATCs with ease and providing an

neutrality. Turning to non-classical music, I found that the 551 was quick to latch on to rock or jazz rhythms, a characteristic which has not previously been noted as a typical Meridian virtue, but which is gradually creeping into some of the 500 series designs. Its even-handed approach allowed a wide variety of musical styles to be greatly enjoyed and, though its transparency was severely critical of the overdone treble of older recordings this was countered by good bass attack and weight. Much of the good rhythmic control is a function of the amplifier's transient attack which, considering the available dynamic range, is excellent.

For comparison I bracketed the Meridian between the more expensive Musical Fidelity A1000 and the much cheaper Rotel RA935BX, both of which are outstanding integrated amplifiers in their class. The A1000 allowed greater depth to the soundstage and brought a warmer outlook to the music. Although it was also capable of marginally greater dynamic swings, thus justifying its higher cost, the A1000 didn't exactly trounce the Meridian, which held its own well. Most noticeable was that the A1000 was uncommonly good at removing the typical glare associated with much CD output, while the Meridian was less interested in hiding such artefacts. The Rotel's merits (which are attributable to its minimalist circuit layout) are a forward and crystal clear presentation, characteristics which were at odds with the Meridian's controlled and more cultured approach to music-making. Better control of the speakers yielded a more transparent performance from the 551, with musical detail being highlighted in a most explicit fashion but without any tendency to thrust the listener into the front row of the stalls as the Rotel was wont to do. Thus the 551 vindicated both its price and its pedigree.

CONCLUSION

I have to say that greater musical thrills and a higher degree of rhythmic bounce could be evinced by the Naim NAIT 3, compared with which the 551 appears more staid and refined. The traditional values of transparency and neutrality are the great strengths of the Meridian 551, which also has the not-to-be-dismissed advantages of system remote control.

As always you have to weigh up your requirements and then base your decision on your own listening trials. The 551 would definitely be on my shopping list of amplifiers to audition.

LAB REPORT

The 551 is none too happy driving low impedance loads. However, ignoring the manufacturer's recommendation for 8 ohm loads we managed to coax it into producing 80W into 4 ohms, showing that nominally 6 ohm loudspeakers would be tolerated. But the impulse test for peak current into a load of 2.2 ohms plus 2uF capacitance proved too much for this amplifier, destroying one output channel.

For outputs up to full power, the distortion spectrogram [Fig 1] shows a smattering of odd harmonic distortion, mainly third and fifth, kept below -70dB relative to full output. Intermodulation results were excellent, with the 1kHz difference tone being almost lost in the noise floor [Fig 2].

Frequency response is flat to very low frequencies, while the power response shows some tailoring above 5kHz. The measurement [Fig 3] shows that output dipped slightly, to -0.5dB by 20kHz, and the overall result shows that sensible bandwidth control has been applied in this design.

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MERIDIAN 551

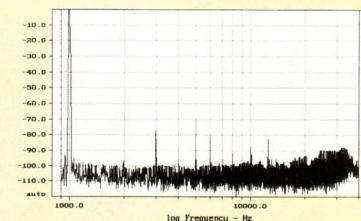


Fig1. Meridian 551: distortion, 1kHz tone full power

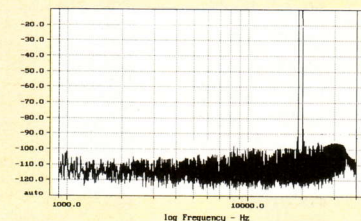


Fig2. Meridian 551: intermodulation 19kHz/20kHz full power

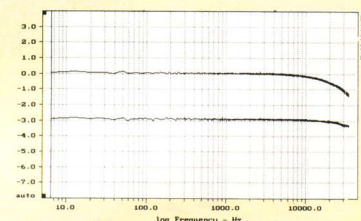


Fig3. Meridian 551: frequency response, one third power, and pre-amp output (lower trace)

Test results		Meridian 551		
Power output				
Rated power into 8 ohms		55W(17.4dB)		
		20Hz	1kHz	20kHz
Both channels 8 ohms		17.8dB	18dB	17.5dB
One channel 8 ohms		17.7d	17.7dB	17.5dB
One channel 4 ohms		16.2d	16.5dB	16.2dB
Distortion at rated power		73dB	-70dB	-74dB
Distortion and noise at 1W/8ohms		-94dB	-92dB	-89dB
Instantaneous peak current		N/A (see text)		
DC Offset D(L/R)		30mV 22mV		
Inputs: 6 Line inputs, optional Phono m-m or m-c input.				
Input impedance and sensitivity (adjustable)				
Line input		27 - 150 mV 20 kOhms		
Optional Disc				
m-m input		0.5 - 3 mV	47 kOhms	100pF
m-c input		38 - 210 uV	220 Ohms	10nF
Distortion & Noise		20Hz	1kHz	20kHz
CD input		-96dB	-94dB	-91dB
Input overload		>28dB		
CD input:				
Dimensions(wdh, mm):		321 x 332 x 88		
Price inc. VAT:		£695		



Meridian's matching 500 series includes CD transport, tuner and multi-room controller

admirably firm bass performance with excellent extension.

Listening to classical music generally, I found the 551 slightly dry, with a hint of brightness; transparency was fine, and there was a very coherent quality throughout the audible range, with no tendency to added warmth or midrange forwardness which might disturb its