

## Meridian 602/603

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It seems an age ago that the last *Hi-Fi Choice Collection* hit the news-stands. In the intervening period, high-end has produced a plethora of products. But has compact disc really become a true audiophile medium? 'Bitstream' (Philips' version of low-bit digital to analogue conversion) has 'arrived', and all manner of claims have been made. Some are true, but many have led to heated debate. Meridian, however, has decided to take the bitstream route and has, in my opinion, been at the forefront of this particular technology. It's the major reason why low-bit has really taken off.

Recently, the company has made a good deal of progress with digital products in general, including loudspeakers as well as CD players and digital converters. Eighteen months or so ago in *The Collection*, it was the 207, using Philips 16-bit technology, which I found more than competitive with the high-end players around at the time. Since then, a progression of products has led to this latest descendant of 207 - the 602/603. While the 602/603 together have the same function, they are not replacements for the 207, as this task falls on the 208 (a bitstream 207).

The 208 was one of the high points of the past year - it delivered an infinitely more civilised performance than almost everything else for less than the price of a second-hand Skoda (or a new one for that matter). The 208 was followed by the 203, a digital processor which offered even better performance than the 208, but transport-dependent. Also launched by Meridian were loudspeakers which could take a digital input from a transport (either via a coaxial or optical link) as they have a decoder and amplification in each speaker. Even more recent is a speaker in the 600 range with a crossover in the digital domain - even more digits required. This route of digitally receptive equipment only requires a CD transport, so there's

no point in having a full CD player. Thus Meridian has gone the obvious route by designing a separate transport for the 600 line. And while you're designing a top transport, why not make a converter to go with it? And so the 600 series spawned a transport and converter.

One of the reasons why the 208 and its siblings worked so well was the adaptive technology used to produce differential mode operation. This means that two DACs are required for each channel; by employing shift registers to delay sections of code, one chip can be used for left and one for right channel. Philips seemed impressed by this system and has included it in the latest bitstream DAC called the BS DAC (standing for 'Bitstream', not 'Boothroyd/Stuart'). It's designated the SAA7350 and has four bitstream converters operating in true differential mode and using third-order noise shaping.

### An obvious vehicle

From Meridian's point of view, the obvious vehicle for the BS DAC was the new 600 series. Whereas the original bitstream DAC had a digital filter built in, the latest incarnation allows the use of various separate digital filters - presumably so the Japanese will want to buy it to use with their 18 and 20-bit digital filters. Interestingly, the 603 uses a digital filter in the ordinary bitstream chip. Internally, it has benefited from the gestation of the prior Meridian range and it uses hi-tech four layer boards and optimised layout. The two-box design ensures good isolation. The volume control is a 64-step discrete FET controlled amplifier with high performance, specially selected operational amplifiers. The digital input automatically locks on any digital signal between 32kHz and 48kHz and a special PLL oscillator and control loop are housed in a separate screen can. Eight separate power supplies are employed. The digital input can either be via coax or

optical with a special high speed optical receiver employed.

While the new 600 components are a top-of-the-line series in what is hardly a cheap range of hi-fi, in terms of the high-end in which it competes it is not overly expensive. Styling and finish are better than Meridian's usual efforts. The products have polished hard black anodised cases with real glass fronts. Following on the familiar theme, the 602/603 combination uses two two-box units, bolted together with finely finished extrusions.

The front panel has a minimum number of controls to facilitate basic operation; it bears the Meridian logo in gold behind the smoked glass panel and all gold-plated soft touch bars, which protrude through slots in the front panel, are hinged at the bottom. The display uses a comprehensive dot-matrix array with full message annotation and fine readability. The 602 is a CD transport with both twin optical and twin coaxial outputs. It interfaces with the 603 via the inter-product connection (comms) which is compatible with other Meridian components.

Each operation is denoted by back-lit legends and display responses. The eight source keys on the 209, which is a versatile and rather heavy remote control which provides total access of all functions, include a phase invert facility. Each input can have assigned to it what Meridian calls a Logogram (CD, Radio, etc) which is displayed when that input is selected. Extra facilities are available via the comprehensive remote control. Selecting CD will route the player through the variable output. Out of the fixed outputs, it's just like a CD player and out of the variable ones the converter works like a separate source for the preamplifier.

The 602 transport uses a fast response CDM4 which is fixed to a Meridian magnesium die-casting for added rigidity. It features two-box construction with one box containing the CD mechanism, power supplies and servos, while the other contains the digital and display circuits. All the latest Philips control chips are used and the master oscillator is screened; it sports a new high precision circuit. There is a user adjustable settle time as well on track-seek, allowing a variety of out-board processors to lock reliably. The front panel controls cover open, play, stop, pause,



next and previous tracks.

There are some changes in the control functions if compared with the normal Philips based CD players. When play is pushed, the current track is replayed from the start; on the Meridian you jump to the next track. However, single key track entry enables quick track access - an improvement over the 207.

### Sound Quality

Designers, Boothroyd & Stuart do not really take vinyl that seriously any more, as the company majors on digital sound sources, so it will come as no surprise that the disc stage isn't really that good. Set up for moving coil gain as mine was (it's switchable to moving magnet inside) and fed by my normal Linn set-up, it didn't really deliver the goods. OK, I was undoubtedly spoiled by having what I considered to be one of the very best preamplifiers in the world at any price, in the Conrad-Johnson *PF1*, but I did also compare it to lesser models. It does not throw depth, create space, boogie or generally keep you listening. It's up-front, a touch grainy and forced and it lacks body and soundstage solidity. It throws away detail and sounds totally off the beat-out-of-time. Joni Mitchell for instance (on any of her albums) didn't bounce but sounded repressed.

The 603 is a preamplifier and although it has fixed CD outputs which come straight off the DAC as it were, it seems reasonable to assume that it will be used mainly in preamp mode. Initially, the CD player was assessed from the variable output. Operating in this fashion, the preamp proved itself to be well up with most of its peers, but it's not exactly perfect. Compared with the fixed outputs fed through a passive potentiometer or top quality line stages, into Krell and Musical Fidelity power amplifiers, the Meridian shed some detail. The bass dynamics were softer, transients blurred and images were moved closer. That is to say that with the best, sharp images are formed of singers and instruments within a sound stage; with this one you move closer to the stage so that the performers grow in size but they are also a little fuzzier, lacking a little body and realism. In saying this, I must support the fact that voices of both male and female performers are still well articulated and with good enunciation, but dynamics are a little compressed. The sound stage itself has good dimensionality - rather better than the 208, in fact, but then you would expect that.

Ifed the fixed output through a 50kohm Alps volume control to my power amplifiers and it was in this mode that the unit delivered its best. The stage spread

### CD Meridian-style: better than vinyl?

out, depth especially was enhanced and the images gained extra solidity. Although I still detected a trace of upper midrange hardness it was not annoying, but it did accentuate that frequency band. The treble was just a touch untidy and the bass was still a little soft. Even in this guise, bitstream still seems to lose some dynamic impetus and grip on the overall performance. The result is that the members of the band don't quite play together - better than most CD players but not good enough to usurp vinyl. The transport was found to be the best yet tried, with excellent definition and information retrieval, especially in the midrange.

Lack of space precludes a detailed summary of lab performance but I examined the unit in the laboratory and found it to perform exceptionally well on all counts.

### Conclusion

Although the 602/603 combination is not really designed to operate as a standalone CD player (each unit costs £1,500), the resulting sound from the fixed output, when connected as described, is the best I have come across from any available CD player. Also, I consider both boxes to be the best of their type. On these grounds alone the two units are worth recommending. If you compared vinyl with CD using this preamplifier, you would find that CD Meridian-style really is better than vinyl - but then that's only one instance.

When finish, aesthetics and general design are taken into account, the package looks even more promising, although I can't help feeling a little disappointed that the preamp wasn't more transparent and my partiality for vinyl means that a better phono stage is really a must. For myself I have answered the question: CD has not yet come of age, although this is the best transport, digital processor and complete CD player I have yet encountered.

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