

MERIDIAN D6000

£7650

This elegant Meridian floorstander blows away most of the competition and launches speaker design into the digital age

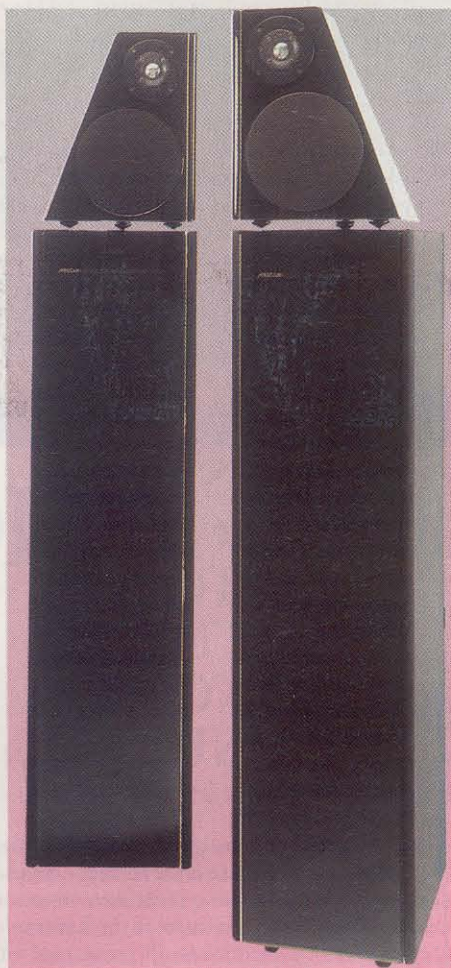
Just what do people mean when they talk about digital loudspeakers? One suggestion is that for a loudspeaker to be truly digital, its output must be determined directly from the incoming bitstream. That would require digital to analogue conversion to take place within the transducers or drive units. To our knowledge this technological barrier has yet to be broken. Until such time, the Meridian D6000 is the nearest commercially available product to a pure digital loudspeaker.

The 607 outboard black box supplied with the D6000 is the first analogue to digital converter made by a hi-fi manufacturer specifically to interface with a digital loudspeaker. Without the 607 or equivalent converter, owners of the D6000 will be unable to connect their analogue sources – record players, cassette decks, tuners etc – to the digital loudspeaker. The introduction of the 607 speaks volumes for the advanced technology at the heart of the D6000, which looks like a loudspeaker but is in fact an awful lot more. Apart from the array of drive units, the D6000 conceals a mass of electronics including those for power amplification and command/control resources.

Installation involves programming the D6000 via a series of nested menus accessed by remote control which are displayed on a front display area of each speaker. 'Master Status' is assigned to one of the two speakers, which then controls the rest of the system and tells the rest of the system what type and number of units are connected, whether they are from Meridian, and to which input(s) they are connected.

The D6000 accepts digital inputs only, of which there are four: two each coaxial and optical. These are switched dynamically according to remote control commands, or from a system preamplifier if one is used. In most cases there is no need for a preamp at all; the D6000 has adequate inputs for most applications as well as onboard DSP (Digital Signal Processing) to take care of other housekeeping tasks expected of a preamp.

The most impressive demonstration of the D6000's DSP capabilities is provided by the variable directivity crossover. The frequencies passed by each drive unit are controlled by digital filters instead of the usual power robbing maze of components. Phase problems from such filter roll offs are eliminat-



ed. Bass response is also actively extended – the system has positive gain below 100Hz to lower the bass floor. Crossover points

AT A GLANCE

- ▶ 'Digital' speakers with power amps and digital crossovers built in
- ▶ Digital Signal Processing allows control of balance, volume etc without passive components
- ▶ Excellent bass extension with open and highly detailed midband
- ▶ Astonishing volume levels possible without significant distortion
- ▶ Adjustable directivity provides a 'correct' listening axis for any user, whether standing, sitting, or squatting on the floor
- ▶ Enormous musical depth, breadth and scale

are 200Hz and 2.6kHz, and Bitstream technology is used throughout the system.

In addition, adjustable directivity (courtesy of a control on the system remote) provides a 'correct' listening axis for any listener, whether standing, squatting or sitting on the floor.

In our judgement the D6000 is 135cm of sheer elegance. Each speaker consists of two parts. The bass section is a large floor-standing box, spiked above and below decks. Two 210mm bass drivers in diecast frames are on each side of the carcass operating in opposition to produce a near cylindrical wavefront. This mode of operation means there is no net rocking movement on the enclosures.

Spike-coupled above is the midrange/tweeter, a superbly lacquered thick-wall sealed box with rounded edges to reduce diffraction. All units other than the SEAS-derived customised metal dome tweeter have polypropylene cones. The status display and remote control receiver are fitted behind the blackened glass front panel of the main (bass) enclosure. Separating the bass section of the D6000 helps prevent mutual interference.

A Meridian 603 preamplifier was used to provide extra flexibility. A 602 CD transport, 204 tuner and 607 A-to-D converter were also used – a complete Meridian system in fact – plus a Townsend Rock Reference turntable fitted with an Excalibur arm and Dynavector DV17D2 MC cartridge.

To say sound quality was first rate is to considerable understate matters. In a number of areas the D6000 sets new standards. Its combination of bass depth, authority and control for example is quite superb. At high volumes, the room shook and the sealed double glazing units rattled.

Naturally, the midband is pretty much as good as the bass. (If it hadn't been, the bass itself would have been spoiled since it is deeply tied in with the reproduction of bass harmonics). Again, a key quality of the system is its tremendous openness and clarity. Stereo imagery has enormous depth, breadth and scale (especially scale), though we found it necessary to toe the speakers inwards to achieve central focus. Treble was exceptionally sharp and clear.

In short, what Meridian has achieved here is nothing short of a triumphant vindication of the thinking that inspired the system. Meridian has demonstrated an ability to effectively design DSP functions, especially the ability to separate frequency and phase performance in the crossover. In addition, there are benefits to CD and DAT users in that it is beneficial to keep existing digital signals in digital form as long as possible to avoid the losses inevitable in amplifier and buffer stages, interconnects and speaker cables. The signal is converted into analogue at the last possible moment, at the input of the power amp, itself adjacent to its drive unit(s). Complexity, build quality and performance fully justify the price.