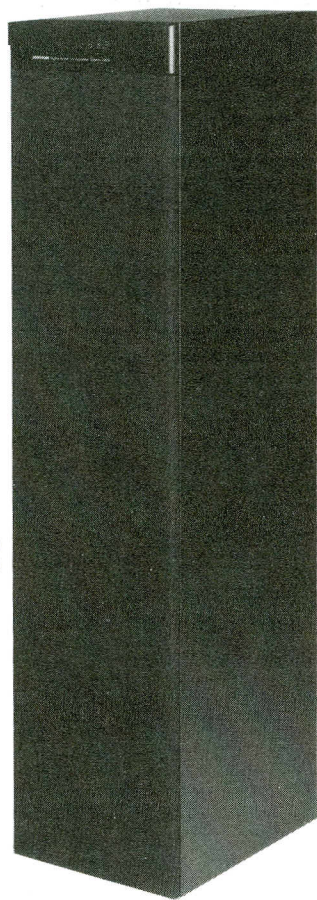


MERIDIAN

D600

LOUDSPEAKER



THE designers at Boothroyd Stuart have built up an enviable reputation for original thinking, first class engineering and stylish presentation. Several of their Meridian audio products have won Design Council Awards (for appearance design and fitness for purpose) and at the same time achieved favourable critical acclaim (for technical performance and subjective sound quality). Our most recent review (July 1988, page 226) reported on the modular Meridian 200 Series units comprising the 204 FM tuner and the 207-PRO CD player-cum-preamplifier (which has the disc drive in one box and the electronics in another). I used these with a pair of active Meridian M30 loudspeakers and found the user interactivity aspects highly interesting.

In recent months Boothroyd Stuart have made further inroads into the multiple-room audio-video marketplace for which their 200 Series electronics and various active loudspeaker models are ideally suited. Other manufacturers also offer loudspeakers with built-on amplifiers but BS espoused this concept quite a few years ago and are very experienced in tailoring the electronics to the drive units and enclosures to produce low-distortion smooth-sounding designs.

A logical development—to Allen Boothroyd and Bob Stuart if not yet to other designers—was to make space inside the loudspeakers for dedicated digital-to-analogue con-

verters. It then becomes possible to run a cable direct from the digital outlet on a CD player (or DAT machine) to the loudspeakers, thus keeping the signals in the digital domain until the last possible stage and avoiding potential hazards with analogue cables, impedance matching, damping factor, etc.

The first result of this philosophy is the D600 "Digital Active" loudspeaker whose list of contents looks like this: 1) a digital preamplifier controlling up to three digital sources and providing a digital output for another device; 2) an analogue preamplifier controlling up to two analogue sources, balanced or unbalanced; 3) a digital audio processor for decoding, error detection and correction; 4) a D/A converter; 5) remote control of all functions including volume, balance, mute and tone control; 6) a controlling computer; 7) a communicator with other 200 Series units for stereo, surround sound or multiple-room installations; 8) a three-way loudspeaker drive unit array with three 75-Watt power amplifiers. This formidable collection of innards is housed in a modestly dimensioned floor-standing column measuring just 899 x 211 x 295mm, though the 32kg weight is perhaps a clue to the interior complexity.

The cabinet is made of 18mm plywood and handsomely wood veneered. There is a glass-faced display panel near the top indicating source, control status, etc. The

SPECIFICATION

Enclosure type: three-way bass-reflex enclosure with built-in digital processing and power amplifiers
 Frequency response: 36–20,000Hz
 Drive units: two 160mm bass, 25mm tweeter
 Power amplifier rating: 3 × 65 Watts
 Maximum output: 110dB SPL at 1 metre
 Input sensitivity (analogue): 0.775V
 Digital processing: 16-bit 4-times oversampling
 Distortion: less than 0.2%, typically 0.01%
 Noise: –90dB
 Dimensions (H × W × D): 900 × 210 × 295mm (35.4 × 8.3 × 11.6 inches)
 Weight: 32kg
 Manufacturer: Boothroyd Stuart Ltd., 13 Clifton Road, Huntingdon, Cambs PE18 7EJ
 UK retail price: £2,500.00 per pair, complete with remote control unit

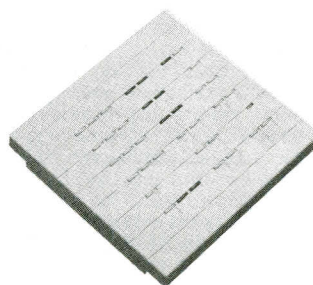
remainder of the front panel is covered by an acoustically transparent grille cloth on a matching rounded-edge frame. The drive units comprise a 25mm aluminium dome ferrofluid damped tweeter and two 160mm polypropylene units covering bass and middle frequencies respectively. There are four plastic feet which can be levelled and fixed with the wrench provided. The enclosure is a bass reflex design with a circular vent fairly low down in the rear panel. Once the best position in the room has been decided, it is recommended that the spiked feet are substituted.

The back panel offers a choice of input and output connections: two pairs of positive and negative phase analogue input phono sockets; two digital input phono (coaxial) sockets; a third digital input fibre-optic connector socket; a Global input DIN socket to communicate with and receive digital signals from other Meridian 200 Series components (used on the 'Master' loudspeaker only); a Local output DIN socket to send information from the Master to one or more 'Slave' D600 loudspeakers.

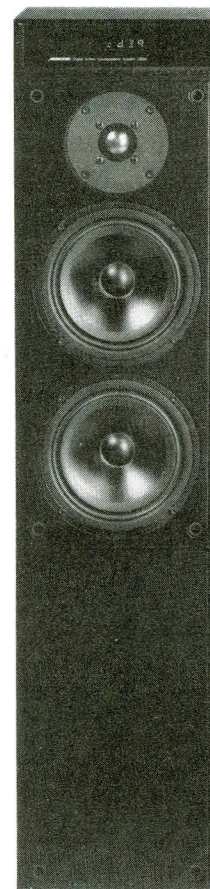
So many installation permutations are possible that separate Set-up and User manuals are provided as well as a 'Getting Going' leaflet and a key-card. However, once everything is happily installed, the system is unusually versatile but simple to drive. I began with the simplest configuration, a pair of D600 loudspeakers and just the Meridian 207-PRO CD player. This involved me in making three mains socket connections (the makers advise against using multiple mains adaptors) plus the six-metre DIN-to-DIN lead from Master to Slave D600 and the eight-metre DIN-to-DIN + Phono lead for connection to the 207-PRO.

With a disc loaded and CD selected on the 609 remote control handset, I was in business. The display on both loudspeakers showed "CD 31", the number referring to the volume control setting (0 to 64 in 1.5dB steps). The music sounded fairly loud at this automatic (default) setting but the volume up/down keys gave me instant control.

Naturally the other signal controls also had normal default settings: balance to centre, and treble "tilt", bass and Q (a low-frequency cut at 40Hz to be used when the loudspeakers are close to a wall or in a small room) all at "flat". I experimented with these to familiarise myself with their operation. The effects were subtle but I generally preferred the default conditions. However, storing preferred tone settings is easy



Meridian 609 remote control handset



and these can be recalled using the Memory key, reviewed using the control key, or cancelled using the Reset key.

As a variation on this minimalist configuration I connected a non-Meridian radio tuner and cassette deck to the inputs on the 207-PRO and ran phono-to-phono leads (extra long ones) from the 207-PRO analogue (variable) output to the analogue inputs on both D600 loudspeakers. I could then change sources by remote control and set the relative source sensitivities, though with rather less versatile control than I would with Meridian's own 204 tuner.

How they performed

It was now time to get down to some serious listening. Depending on the quality of the source material, I reacted first to the loudspeakers' unusual crispness of attack. The complete absence of unwanted hangover

or cabinet resonances made percussion instruments sound ideally—well—percussive. A bonus from this was the clarity of unmasked inner detail which fans of every kind of music would surely appreciate. This clarity was achieved without any tendency to treble emphasis; indeed, I found that I liked a small degree of upwards treble tilt on some items—perhaps in compensation for the effects of absorbent room furnishings. A check on frequency response did reveal an unusually smooth consistency (within $\pm 1\text{dB}$) over almost the entire spectrum, just dipping a little from 18kHz upwards. Presence on voices was pleasantly immediate, rather than forward. Together with this musical and civilised handling of middle and treble went a tightly controlled bass end.

At times I felt that the bottom octave needed more nourishment, but we are now into room-dependent

effects. I got the best balance with the loudspeakers set on their spikes about one metre from the back and side walls. However, pushing them back a few centimetres did give a natural boosting of bass which many users might prefer, and experiments with the bass and Q controls—so easy with the remote control pointing at the loudspeakers—gave enough variation to suit all tastes. Increasing the volume beyond my usual level was very impressive: all the sound components remained intact—transient response etc.—whilst the tonal quality became more full-bodied; all the bass that one could wish yet no trace of overload or climax-crushing distortion. The narrow profile of these loudspeakers almost guarantees good high-frequency dispersion in the horizontal plane, and so it proved. Stereo spread was natural-sounding and could be enjoyed over a reasonably wide listening area.

I rate the Meridian D600 loudspeaker very high as a reproducer of finely detailed musical sounds, and I am ready to concede that this may well be related to the unique use of all-digital connections. Yet I would have to say that something close to this level of sonic performance can be got for much less money. The best of my Compact Discs, relayed straight from the CD player's digital outlet, sounded remarkably life-like and, provided the D600s are used with the Meridian 207-PRO player and other units in their 200 Series (necessary if full remote control in all modes is to be supplied) I would say the price of £2,500 per pair is about right: after all we are looking at the future here and that means digital all the way, with multi-room control as the next step—for which the D600s, with their built-in computers and user-friendly displays, are eminently suitable.

JOHN BORWICK.