

REVIEW

Mordaunt-Short SIGNIFIER

by Trevor Attewell

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'Hi-Fi News and Record Review.'*

You may well ask what 'Signifer' signifies. Having once been the despair of a long-suffering classics master, it was a relief to be able to find out from the maker that the word comes from the Latin for 'standard-bearer'. The name clearly emphasises the top-of-the-market nature of this, the most prestigious loudspeaker in the M-S collection. It is another example of the popular reflex design, but incorporates some novel features.

The cabinet is rectangular, and is finished with the usual veneer on all sides and also on the unit mounting panel, which is slightly recessed. The back is painted in stone and white speckle and has the usual plastic panel let in near the bottom, carrying a pair of convenient push-button terminals and a 3.15A fuse. Across the front and below the unit panel, there is a matt black aluminium extrusion, 100 mm high, with decorative horizontal ridges along top and bottom and held in place by plastic pegs — it is also a good fit in the surrounding wood. This metal strip can be pulled out to reveal the crossover, secured to its back, comprising some two dozen components on a printed board. This is one of only two such readily accessible crossovers that I have come across. The complete sub-unit sits in a recess formed for it by the woodwork of the cabinet and communicates with the interior only by a hole in which the connecting wires to the crossover are quite a tight fit. The strip also has a 5-position rotary switch on one side, labelled 'acoustic environment balance', marked in unit steps from -2 to +2.

The 300mm bass driver, of M-S design, occupies most of the lower half of the unit panel. Above it, on one side, is the 135 mm midrange unit, also of M-S design. It is most unusual these days in having a paper cone, and even more so in the fact that the usual roll-surround is replaced by a semi-rigid moulded termination. Details are the subject of patent application, from which they may be obtained by anyone with the time and patience to flog through the mumbo-jumbo in which these things are written. I am assured that the design overcomes the problems of reproducibility and ageing traditionally associated with paper-based structures.

Above the midrange is the tweeter, with the reflex port (63 mm in diameter and 200 mm long) placed next to it. The loudspeakers are 'handed', so that stereo imaging will not be degraded by the fact that the units are not aligned on a common vertical axis.

Looking into the enclosure, one finds that the midrange unit is in its own enclosure, made in the form of a rectangular wedge, obviously to help reduce coloration, and containing bonded acetate fibre or similar material which is also used to damp the main volume of the cabinet. There is an unusual stiffening device, comprising a substantial steel rod, bolted to the rear face of the bass driver magnet and tensioned by a heavy screw passing through a load-spreading aluminium plate sunk into the rear panel. The screw is driven into a tapped hole in the rear end of the rod. A heavy wood block surrounds the rod, which passes through a hole in it, the block being secured to the inside of the rear panel. Pulling everything down tightly traps the block between the speaker magnet and the rear panel, giving a most effective brace. As always, the buyer should not attempt to dismantle this assembly, since it is easy to distort the unit frame.



Manufacturer's Specification

Three-way reflex unit, stand mounting.

Drive units: MS DCB 300 bass, MS DCM 135 mid of special design, Isophon 25mm tweeter with soft dome.

Crossover frequencies: 500 and 4000 Hz.

Frequency response: nominally 20 Hz. to 25 kHz; ± 2 dB 38 Hz. to 20 kHz.

Power handling: 125 W contoured noise.

Suggested amplifier rating: 25 to 250 W per channel.

Impedance: 8 ohms nominal.

Distortion: Less than 1% at 6 V RMS input.

Sensitivity: 6 V RMS gives 96 dB spl at 1 m (anechoic).

Dimensions: 810 mm high x 385 mm wide x 325 mm deep, without stand. Stand 230 mm high x 385 mm wide x 350 mm deep.

Weight: 29.0 kg. (Packed: 34.0 kg.).

Price: £540 per pair, optional stands £39.38 per pair, both including VAT.

Manufacturer: Mordaunt-Short Ltd., Durford Mill, Petersfield, Hampshire GU31 5AZ. Telephone: Rogate (STD 073 080) 721/2
Telex: 86443 MS HIFI.

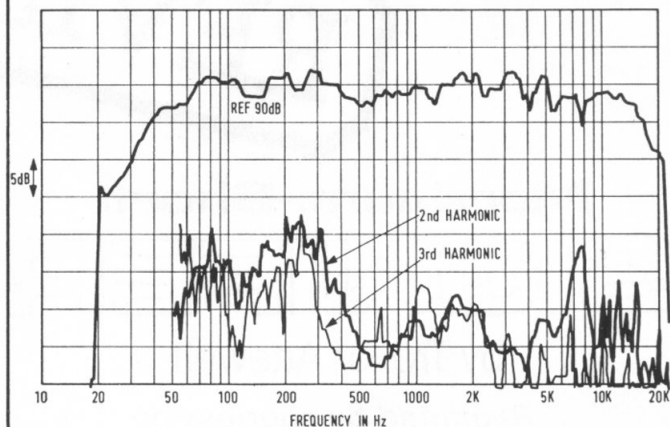
When reviewing a product, such examinations are always left until all other tests are complete, despite the availability of procedural advice from the maker. Further bracing is provided by a horizontal panel, with large cut-outs, near the bottom of the enclosure.

The front cover is conventional, consisting of a brown woven fabric stretched on a wood frame, the whole being pushed into the recess formed by the unit panel, where it is secured by plastic pins. The stands, offered as extras, were of rectangular section metal with a black gloss finish. Strips of non-slip material are provided on the top, and the bottom is fitted with Shepherd castors. If this stand is not bought, an equivalent will have to be made or purchased, since the bass performance is significantly affected if the mounting height is changed.

The Signifer is very well made and has a neat appearance. It could be manoeuvred easily enough over carpet when on its stand, provided it was not pushed from the top, and it was very stable in use. As these samples were pre-production models, no handbook was available at the time of review.

Listening to these speakers on their own for a while was a pleasant experience. The response seemed open and neutral, particularly in the midrange where there was good detail, the top was smooth, and the bass seemed well extended without noticeable resonances. The usual detailed comparisons against our standard ELS, using only high grade material, showed some small differences, none of which was particularly significant. Voices, male and female, were slightly brighter and had a trifle less timbre, high singing voices being a shade more biting where they were basically of hard type. Brass instruments were very comparable, having both the smoothness and the edgy ferocity that can be heard in them, only the trombone seeming a little weaker in its upper notes. Woodwinds generally were a shade less warm, while orchestral strings were a bit more biting — the large orchestra showed a slight tendency for the ambience to move towards the loudspeakers. Organs were very comparable, the only small difference being a reduction in lower manual 8 ft stops, though the pedal stops were extended somewhat beyond the ELS, and were also firm. Transients — bells, percussion and harpsichord — were similar, the Signifer having negligible over-

MORDAUNT-SHORT SIGNIFER ON-AXIS SINEWAVE RESPONSE AT 1m
(HARMONICS AMPLIFIED BY 20dB)



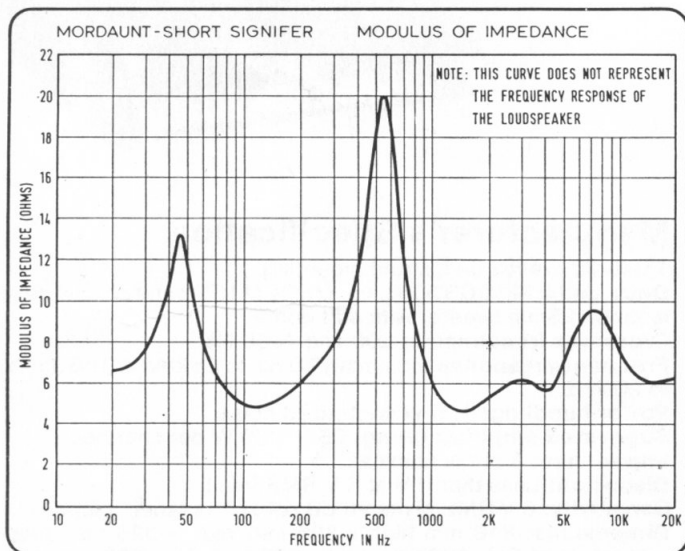
hang. Confirmatory pink and white noise tests did reveal some very slight upper bass colouration, but the overall responses to these sources were extremely creditable.

The stereo image was sharp in the horizontal plane, with no more than the expected slight interference effects due to vertical movement of the head. When the speakers were spaced well apart, there was a tendency to hear them as individual sources if one listened carefully, and this may be due to some small radiation from the side panels. Radiation from front and rear panels seemed negligible, so perhaps some further stiffening of the side walls might improve an already very good performance. There were no positioning problems within the usual reasonable limits. The 'environment balance control' had only a small effect (approx. ± 2 dB maximum), mainly at the top of the spectrum. As usual with such controls, the optimum setting varied with the type of signal, but no position produced any dramatic imbalance.

The open-air response was measured with the microphone at 1 m on the tweeter axis, and confirms the smoothness of the response, which is within spitting distance of the makers' specification. The latter was taken from a provisional document, and the measurement axis is not specified — this alone could easily account for the discrepancy. Similarly, the harmonic distortion does rise slightly above 1% at one or two points at the low frequency end, but I would not regard this as significant. It should be noted that the reference level for the harmonic outputs is 20 dB below that for the fundamental, which makes the distortion appear 20 dB worse than in conventional presentations, where it is off-scale for much of the plot.

The impedance modulus may look dramatic, but it isn't really, and the Signifer is very easy to drive, the minimum resistive component being about $4\frac{1}{2}$ ohms at $1\frac{1}{2}$ kHz. The sensitivity was found to be average, 11 V of pink-noise being required to give an spl of 93 dB at 1 m on axis in the listening room. High sound levels were produced without distortion, and the claimed amplifier compatibility was confirmed.

There is no doubt that Mordaunt-Short have done an outstandingly good job on this model, which fully justifies their choice of name. It has an extended, transparent and relaxing response and it joins the rather small band of loudspeakers with which I could live happily, supposing that I had to confine myself to a single, full-range type. I can recommend the Signifer.



Mordaunt-Short Ltd

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