AS 100 HIGH DEFINITION



100 HIGH DEFINITION



SYSTEM CONCEPT

The infinite variety of music in all its forms, structure, scale of performance, dynamic extremes and tonal colours imposes formidable demands on any music reproduction system.

That some of these characteristics can be adequately conveyed, even by modest music systems, is a tribute both to the ingenuity, skill and experience embodied in their design and to the tolerance of the human ear in reconstituting a facsimile of the original performance.

The truly discerning listener, however, requires more than an approximate replica of the *sound* of a performance. He seeks, in addition, a sense of emotion, atmosphere and involvement – the essence of the musical performance and of its successful re-creation.

The MS 100 is the first in a range of products designed specifically to meet these stringent demands, combining 'state of the art' musical performance with outstanding aesthetics.

If the informative nature of the MS 100 is to be fully realised, the ancillary drive equipment must, necessarily, meet similar standards.

Conceptually, the MS 100 emulates, at considerably lower cost, some of the performance advantages of active loudspeakers – in which each drive unit is directly coupled to its own amplifier, preceded by an active filter.

In the MS 100, a new Mordaunt-Short designed bass unit with near ideal characteristic and very wide bandwidth is direct-coupled to the driving amplifier – eliminating the distortions and phase anomalies associated with both passive and active filters. Because it is unfiltered it handles, under tight control of the amplifier, virtually all the information fundamental to successful reproduction of the musical signal. This pseudo active driving mode is complemented by filling in the final octave of musical detail with the small, fast tweeter which is ideally suited to such a role.

These techniques would have little merit unless they were supported by an enclosure of sufficient quality and consistency. Mordaunt-Short Engineers have continuously researched the role of the cabinet in determining the success of a loudpseaker — devising, over the years, manufacturing techniques which ensure cabinet rigidity of a consistently high standard complemented by outstanding craftsmanship. Both acoustic and aesthetic qualities of the MS 100 cabinet benefit significantly from this experience.

Mordaunt-Short's inaudible **POSITEC** total overload protection system allows the MS 100 to work quite safely at realistically high sound levels without fear of damage from accidentally overdriven amplifiers — whatever their power rating.*

 up to 300 watts per channel – see **POSITEC** specification sheet and Owner's Guide for further information.

TECHNICAL DESCRIPTION

System summary

Compact, high definition, wide bandwidth, high efficiency, infinite baffle, two drive unit loudspeaker suitable for rigid stand mounting close to rear wall. Base fitted with screw inserts for secure rigid mounting on Mordaunt-Short High Definition Frame Stand. High quality wood veneer finish.

Drive Units

165mm Mordaunt-Short designed long throw bass unit with ultra lightweight pulp diaphragm for high efficiency, exceptionally smooth, extended response and excellent transient performance. Large, high temperature voice coil and oversize magnet assembly.

12mm ultra wide dispersion synthetic dome tweeter with short horn loading and low moving mass for high efficiency and superb transient response. Ferrofluid cooling and damping.

Filter

Single section high pass filter in tweeter circuit only. Close tolerance, generously rated components mounted on printed circuit board ensure low insertion losses, total consistency and complete reliability.

SPECIFICATION

The emotions aroused in the listener by a musical performance cannot be quantified. For similar reasons, the ability of a loudspeaker to re-create the emotional effect of the original performance must be judged subjectively. Specifications, as conventionally applied to loudspeakers cannot, therefore, be musically relevant to the MS 100.

The MS 100 has been developed to satisfy the most demanding requirements at a high level of emotive involvement by a process of continuous subjective evaluation backed by conventional measurement techniques. Stringent quality control at all stages of production ensures absolute product consistency.

Amplifier compatibility: high quality amplifiers rated at more than 25 watts per channel.

Sensitivity: 87dB for 1 watt at 1 metre (pink noise).

Maximum sound pressure level:

101.5dB* (continuous). 108dB* (peak, 1 second duration). (Using a pair of loudspeakers reproducing pink noise in bandwidth 100-10,000Hz in an average domestic environment.)

 If POSITEC system operates, amplifier volume should be reduced to allow reset and to prevent further overload.

Dimensions: 325mm high x 225mm wide x 222m deep.

Weight: each net: 4.5 kg. Pair packed: 10.2 kg.

Finishes: Matched real wood veneers applied to all surfaces except back panel. Choice of Light Oak or Walnut veneer as standard. Other finishes available to special order. Brown fabric grille.

Warranty: Five years.

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SPECIAL INSTRUCTIONS

The most important quality of the MS 100 is its ability to reveal the characteristics of the driving signal – both musical sentiment and technical merit. To do justice to this informative ability, and to gain lasting pleasure from listening to music, the ancillary equipment and music signal you use should be of a sufficiently high standard. Otherwise, shortcomings in the programme source or in any part of your system may be ruthlessly exposed.

If you need advice as to the suitability of your present or proposed drive equipment, please telephone Mordaunt-Short on Rogate (S.T.D. 073 080) 721/2.

POSITIONING

The attributes of the MS 100 will only be realised fully if it is securely mounted on a rigid open stand at least 450mm high. The Mordaunt-Short High Definition Frame Stand is designed specifically to complement the MS 100 and is strongly recommended for optimum performance.

The low frequency output of the MS 100 has been tailored to provide maximum definition in the widest variety of locations and room acoustics. The loudspeakers should be sited as close to the rear wall as necessary (minimum 5cm) to achieve satisfactory low frequency sound balance.

USING

Less accurate loudspeakers often emphasise bass frequencies to add artificial weight and warmth to their sound. Consequently, in contrast, the MS 100 may initially sound slightly lightweight but further listening with the loudspeakers appropriately sited will reveal their correct and uncoloured combination of bass extension and clarity.

The fabric covered grille of the MS 100 may detract from its performance during critical listening and it should, therefore, be removed at such times. Replace after use in order to protect the drive units.

Please read the Mordaunt-Short Owner's Guide for all further information.



Mordaunt-Short

Designers and Manufacturers of High-Fidelity Loudspeakers

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