

B&W DM4

The DM4 is a three-unit monitor loudspeaker system that produces high quality results from an incredibly small cabinet (20.9 litres), making it perfect for home or small studio where space is at a premium.

The bass/mid-range units come in a critically contoured Bextrene cone configuration. This is laminated in a highly resistant damping compound that ensures linear frequency response to at least an octave above crossover. High magnetic damping and heat cured, aluminium lined voice coil mean that the DM4 has very stable, high power handling capacity. The upper mid-frequency unit offers wide dispersion from a virtual point source, and a 19mm low diaphragm mass plastic dome unit extends frequency response to above 25kHz.

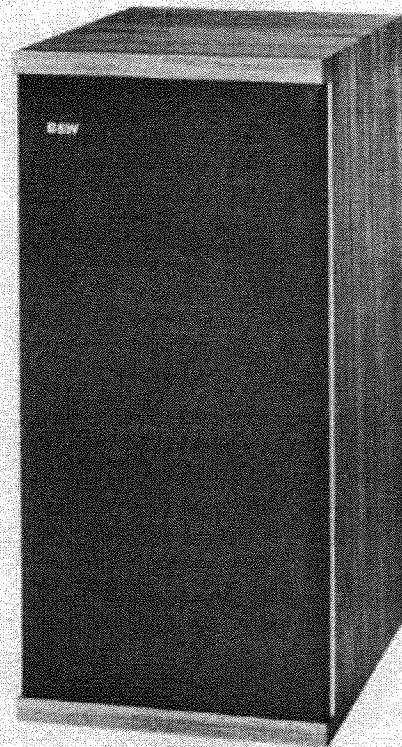
Acoustic loading is by a very dense, critically damped enclosure with a small controlling vent to optimise the response between 60 and 120Hz. This also produces considerable reduction in cone excursion from 30 to 60Hz. The crossover and filter network employ

third order Butterworth filters throughout, and all capacitors are of polyester (not electrolytic) construction.

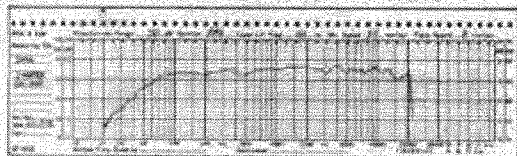
If space is limited, does it mean that the quality of reproduced sound is also limited?

Not long ago the answer would have had to be yes, but in recent years B&W have earned an enviable reputation for producing smaller loudspeaker systems that perform to professional standards. DM4 is the latest B&W system to meet these apparently conflicting requirements. It is a monitor that makes full use of the most recent techniques and materials. It achieves greater sensitivity and has the ability to handle more power than anything of similar size that has gone before.

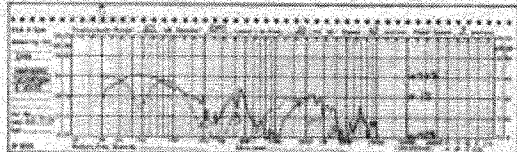
In fact when the DM4 was first developed we had to invest in thousands of pounds worth of equipment in order to measure the finer tolerances. Hardly surprising then that many manufacturers still produce much larger systems that can't begin to match DM4 performance standards.



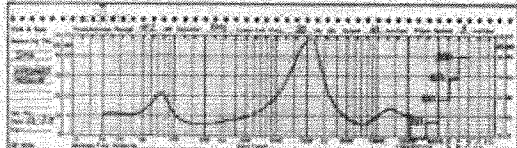
On axis free-field amplitude/frequency response



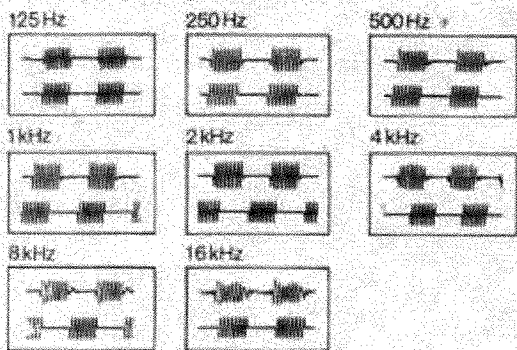
Harmonic Distortion for 8 volts input (solid curve = 2nd, dotted curve = 3rd)



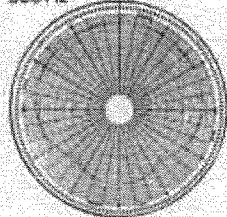
Modulus of impedance



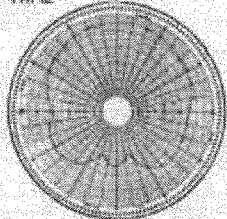
Tone-burst oscillograms, 8-on/8-off



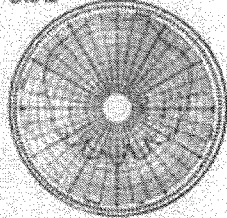
Polar Dispersion 500Hz



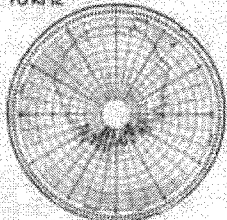
1kHz



5kHz



10kHz



Height
530mm (21in.)
Width
255mm (10in.)
Depth
256mm (10in.)
Weight
11.1kg (24.5 lb.)

Cabinet construction
High-density board used throughout.
Cabinet finish
Standard:
selected veneers of teak or walnut.
Special:
satin white or selected veneers of rosewood or black ash.

Amplitude/frequency response

±5dB 80Hz to 20kHz, 1 metre on axis.

Sensitivity

4.8 watts into nominal impedance (i.e. 6.2 volts) for a sound pressure of 95dB pink noise at 1 metre (anechoic conditions).

Power handling

Suitable for amplifiers between 10 and 30 watts r.m.s. under normal domestic conditions.

Overload Protection

2.0 amp quick-blow fuse to protect systems using amplifiers above 25 watts r.m.s.

Crossover

Crossover frequencies are 2.5kHz and 14kHz. The eleven components are all close tolerance, including polyester dielectric capacitors.

Nominal impedance

8 Ohms.

Bass/mid-range unit B&W DW200/4

Effective cone diameter 164mm.

Voice coil diameter 26mm.

Free-air resonance 30Hz nominal.

Flux density 1.2 tesla nominal.

Mid/high-frequency unit HF 1300MkII

Effective diaphragm diameter 34mm.

Voice coil diameter 20mm.

Flux density 1.12 tesla.

High-frequency unit 4001G

Voice coil diameter 19mm.

Total moving mass 21gm.

Drive unit loading

The DW200/4 is loaded into a vented enclosure resulting in a system resonance of approximately 60Hz. The internal cabinet surfaces are lined with absorbent panels, and the entire cabinet loaded by natural damping material.

All measurements taken at the Building Research Establishment anechoic chamber, Garston.
B&W Loudspeakers Ltd reserve the right to amend all specifications without prior notice in line with technical developments.

B&W Loudspeakers

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