

**B&W**

**DM2A**

**Acoustic Line  
Monitor Loudspeaker**



The DM2A is a three unit, dynamic loud-speaker system that covers the entire audio frequency spectrum from 32 Hz to above 20 KHz.

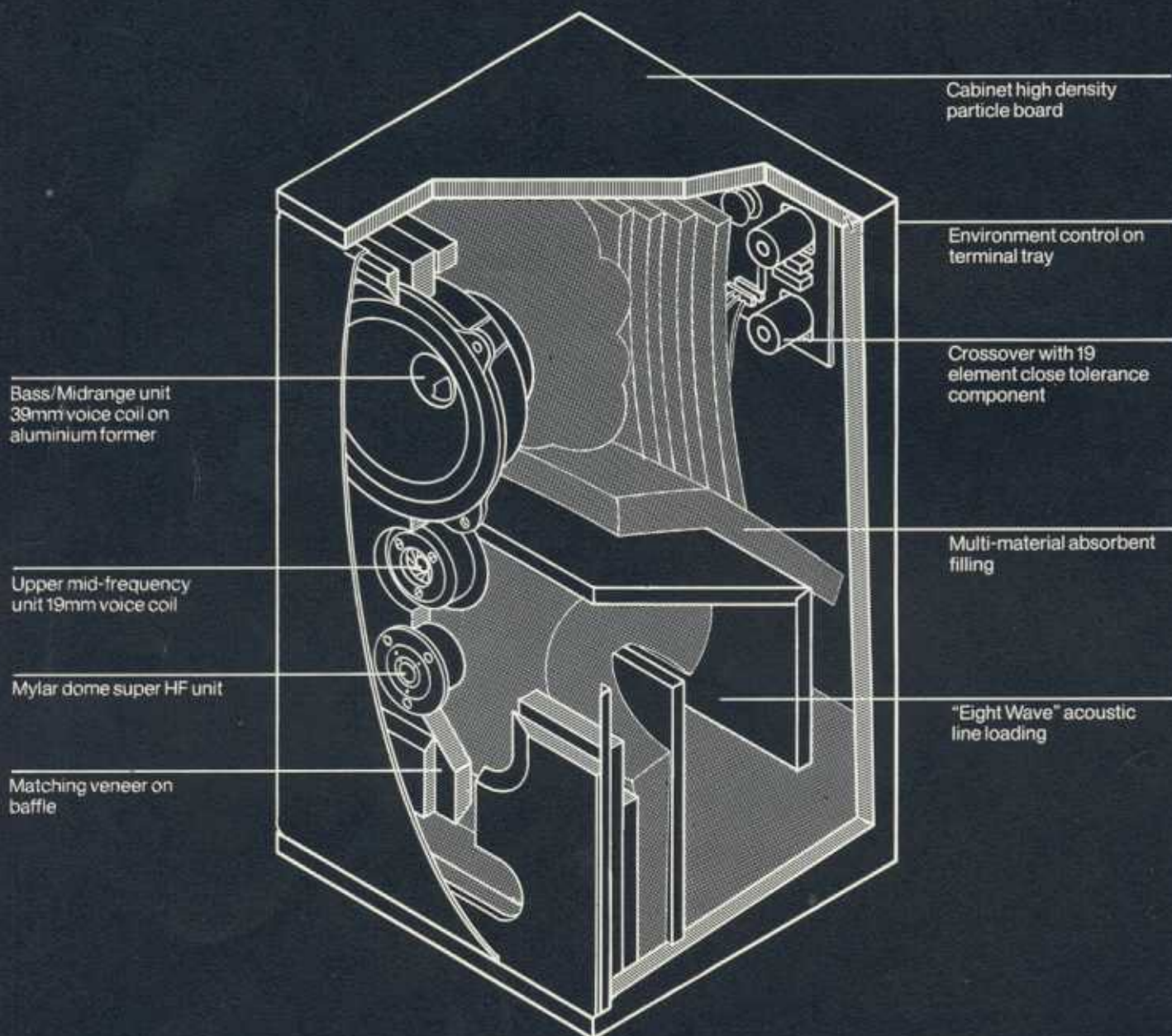
The units that make up the DM2A-DW200/2 Bass-Midrange units, come in a critically contoured Bextrene cone/dome configuration. This is laminated with a highly resistant damping compound that ensures linear frequency response to an octave above crossover. High magnetic damping

and heat cured, aluminium lined voice coil produce extremely stable operation and high power handling capacity. An HF 1300 MK II upper/mid-frequency unit (also found on BBC monitor type LS3/6) offers wide dispersion from a virtual point source.

And a 19mm low diaphragm mass plastic dome unit extends frequency response to above 25 KHz.

Acoustic loading is by a B&W eighth-wave line (UK patents applied for), the vent of

which acts as an augmenting sound source at very low frequencies. The crossover and filter network employ third order Butterworth filters throughout. A band stop section that follows the first low pass section, helps to linearise mid-frequency response even further. The upper mid-frequency unit is fed via a switched attenuator, so that tonal balance can be adjusted to room conditions - a very useful capability.



**Height**  
644 mm (25½ ins).  
**Width**  
353 mm (14 ins).  
**Depth**  
345 mm (13½ ins).  
**Weight**  
22.2 kg (49 lbs).

#### Cabinet construction

The cabinet is a very rigid structure due to the line partitions and additional bracing. High density board is used throughout including the one-inch front baffle.

#### Finish

In addition to Satin White, veneer finishes in Walnut, Teak and Rosewood are available.

In attempting to achieve the best possible reproduction of sound, the size of the loudspeaker system is often of decisive importance.

A DM2A loudspeaker is not really small, yet its size is modest enough to allow it to be more acceptable to most home listeners. But the real point of the DM2A is that the quality of sound that it delivers is of a standard that was, until recently, only available through much bulkier systems.

A fact that has not escaped the notice of the audio trade press, who have been quite lavish in their praise of it.

The DM2A did not earn this praise easily, however. It is the end product of long and painstaking research by B&W, and particularly of our findings on acoustic line rear loading. The relative compactness was also achieved by the imaginative use of the most up to date synthetic materials.

And because we can't control the environ-

ment in which B&W speakers will eventually be used, we have incorporated a special control on every DM2A. This allows the user to adjust his system's performance to compensate for mid-frequency restrictions that may be in the listening room.

The quality of the sound as well as convenience of use are also influenced to some extent by the way a system is mounted. So B&W produce a number of accessories for the DM2A that allows for various mounting options.



### Amplitude/Frequency response

±4 dB, 60 Hz to 20 kHz (control set at "0 dB"), 1 metre on-axis.

### Sensitivity

10.6 watts into nominal impedance (i.e. 9.2 volts) for pink noise sound pressure of 95 dB at 1 metre (anechoic conditions).

### Power handling

Suitable for amplifiers between 25 and 60 watts r.m.s. under normal domestic conditions.

### Crossover

The 19 components of the crossover,

employing 18 dB per octave filters, ensure that each unit operates over its optimum range.

Polyester dielectric capacitors lead to long-term stability, and low resistance inductors give maximum unit damping. Crossover frequencies are 3 kHz and 14 kHz.

### Control "H.F. Level"

±2 dB in the range 3 kHz to 14 kHz.

### Bass/Midrange unit, B&W DW 200/2

Effective cone diameter 167 mm.

Voice coil diameter 39 mm.

Free air resonance 30 Hz, nominal.

Flux density 1.00 tesla nominal.

### Mid/High frequency unit, HF 1300 Mk II

Effective diaphragm diameter 34 mm.

Voice coil diameter 20 mm.

Flux density 1.12 tesla.

### High frequency unit, 4001G

Voice coil diameter 19 mm.

Total moving mass .21 gm.

### Drive unit loading

The bass/midrange unit is loaded into a multi-material line, the geometric layout of which ensures that rear radiating mid-frequencies are effectively absorbed.

On-axis free-field amplitude/frequency response (taken in the anechoic chamber of the Building Research Establishment)



Harmonic Distortion for 10 volts input (solid curve = 2nd, dotted curve = 3rd.)



Modulus of Impedance



Tone Burst

125 Hz



250 Hz



500 Hz



1 kHz



2 kHz



4 kHz



8 kHz



16 kHz



Polar Dispersion  
500 Hz



1 kHz



5 kHz



10 kHz



B & W Loudspeakers Ltd reserve the right to amend specifications without prior notice in line with technical developments.



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