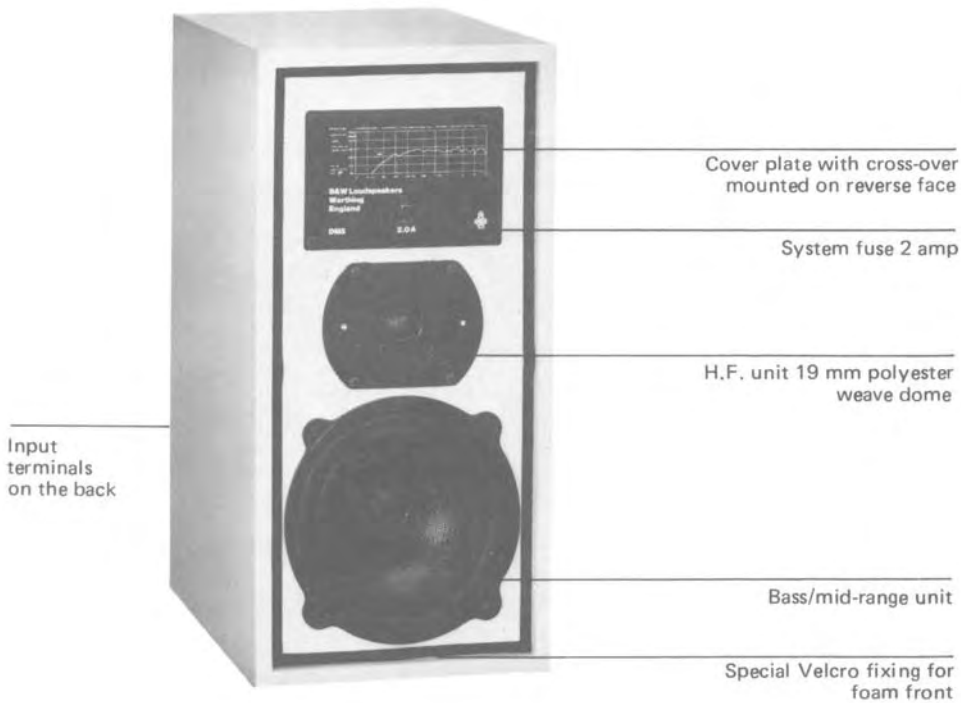


B&W DM5

Instruction
Manual



B&W Loudspeakers



Unpacking and Electrical Connection

The packing is straightforward. Simply open outer carton and remove polystyrene when the two speakers can be removed.

It is wise to retain this packing in case of future transportation.

Connection

Connection to the output lead from your amplifier is made to the sockets at the rear of the loudspeaker by means of the 4 mm. plugs or standard DIN loudspeaker plug (both provided). In the case of the 4 mm. plugs, the red plug is for connection to the positive socket on the loudspeaker panel and positive output terminal of your amplifier. Similarly the black plug is associated with the negative terminal on the loudspeaker and amplifier output. If the alternative DIN connector is used similar CARE SHOULD BE OBSERVED in polarity for connection.

In order that your loudspeaker is correctly phased it is imperative that the instructions are observed.

It is advisable to keep the series resistance of connecting cables as low as possible by using reasonable heavy gauge cables. Our recommendations are as follows:

Under 10 metres: 16/0.2 mm. Over 10 metres: 24/0.2 mm.

Your loudspeaker is now ready for operation.

Phasing

The centre image in stereophonic relies on 'in phase' components of equal amplitude and it is important to check that your loudspeakers and other items in the reproducing chain are correctly connected. If other items in the chain such as pick-up cartridge etc. are correctly connected the method of connection of loudspeakers outlined at the beginning of this section will be correct. However, there is a simple test which is worthwhile carrying out.

Feed both channels with monophonic source — e.g. mono radio, a mono record, or a stereophonic record with the control unit function switch turned to 'A+B' or 'Duo. mono.' If phasing is correct, when listening from a centre position between the loudspeakers, the sound will appear to originate from a relatively small area between the loudspeakers. If incorrect the sound image will be broader and spread across the area from the two loudspeaker boundaries.

If phasing of any item of equipment is incorrect, reversal of any one item will correct the fault.

Siting your Loudspeaker

The position of loudspeakers in the listening room is usually determined by layout of existing furniture.

Nevertheless the DM5 design does allow the speaker to be mounted direct on a wall or placed on a shelf or similar piece of furniture.

To assist, B&W have designed a wall mounting kit type WMK4/5 which is complete with rawlplugs, screws, explicit instructions and templates to make the installation as simple as possible.

Kits may be obtained from your local Hi-Fi retailer.

Fault Finding

The DM5 is protected by a 2 amp system fuse readily accessible — see illustration at the beginning of the booklet

Replacement fuse type 20 mm. Quick Blow 2.0 amp should be obtainable from any reputable Hi-Fi dealer.

Should your loudspeaker fail to function, check the fuse.

If the new fuse fails then ancilliary equipment should be checked before referring the speaker to your dealer for repair.

B&W Loudspeakers

Distributed throughout the world

Purchasers in foreign countries return Guarantee to the appropriate Distributor or Agent.
U.K. purchasers return Guarantee direct to B&W Loudspeakers.

Convoy International (Pty) Ltd.
4 Dowling Street,
Woolloomooloo,
2011 Sydney,
AUSTRALIA.

Ets. Van der Heyden,
Brusselbaan 278,
9440 Erembodegem,
BELGIUM.

Remcron Electronics Ltd.,
2250 Midland Avenue, Unit 1,
Scarborough,
Ontario,
CANADA. M1P 4R9.

Rossing Nielsen Electronics,
Ltd.,
Labaek 2,
4300 Holbaek,
DENMARK.

Reditec,
27 ter,
rue de Progres,
93107 Montreuil,
FRANCE.

Leon V. Jacoel,
Praxitelous Str. 40,
P.O. Box No. 245,
Athens,
GREECE.

Audioscript,
Nieuw Loosdrechtsedijk 107,
Loosdrecht,
HOLLAND.

Gammavox,
Via P. Calvi 16,
20129 Milano,
ITALY.

Sound of Music Limited,
82/84 Knutsford Boulevard,
P.O. Box No. 338,
Kingston,
JAMAICA.

Arnold & Wright Limited,
210 Willis Street,
Wellington,
NEW ZEALAND.

Matesil,
Rua 31 de Janeiro, 223-1,
Porto,
PORTUGAL

Atlas Sound Company,
B1/3 UIC Building,
5 Shenton Way,
SINGAPORE 1.

Foglar Sound (Pty) Limited,
Parliament Towers,
105 Plein Street,
Cape Town,
SOUTH AFRICA.

Vieta Audio Electronics S.A.,
International Department,
Bolivia 239,
Barcelona 5,
SPAIN.

Svensk Audioproduktion ab.,
Karl XI-gatan 1,
221 01 Lund,
SWEDEN.

Hi Fi Electronics,
Idastrasse 3,
CH 8003 Zurich,
SWITZERLAND.

R & S International Sales,
39 Pembroke Street,
Port-of-Spain,
TRINIDAD.

Zener Electronics Services,
P.O. Box No. 245,
Dubai,
UNITED ARAB EMIRATES.

de Vivanco & Co.,
2070 Ahrensburg,
Ewige Weide,
Postfach 1320
WEST GERMANY.

INSPECTION CERTIFICATE

Bass Phase		Programme	Pen Test
White Noise		Pwr. & Distortion	Appearance

B&W DM5

SERIAL NOS. 000701 & 000702
--

GUARANTEE

The above apparatus is Guaranteed against faulty material and workmanship for a period of five years from the date of purchase subject to the following conditions:

- (1) The enclosed guarantee registration card must be completed and posted to B&W Loudspeakers within 14 days from the date of purchase.
- (2) Any claim arising under this guarantee should be made either direct to B&W Loudspeakers or to the authorised dealer from whom the equipment was purchased and whose name appears on the registration card.
- (3) In the event of service being required from B&W Loudspeakers the equipment must be securely packed and despatched to the address below, prepaid and if desired insured by the owner.
- (4) Defective component parts (excluding valves, transistors and fuses— which are covered separately by the manufacturers of these components) will be replaced free of charge but labour and cost of transit may be charged at the discretion of B&W Loudspeakers.
- (5) This Guarantee expressly excludes:
 - (a) Damage caused by incorrect use of the apparatus.
 - (b) Loss or damage in transit in either direction.
 - (c) Contingent and third party liability.
- (6) Any service modification or alteration carried out by any other person than the authorised representative of B&W Loudspeakers or their appointed agents renders this guarantee invalid.
- (7) No alteration or variation of the Guarantee will be recognized.
- (8) This Guarantee is not transferable.

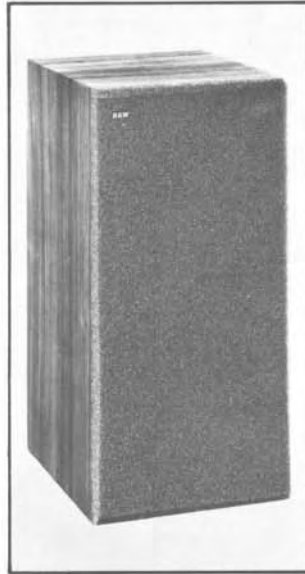
B&W Loudspeakers

Meadow Road - Worthing - West Sussex - BN11 2RX

Telephone (0903) 205611 - Telex 87342 'MONEX WORTHING'

B & W DM is the registered trade mark of B & W Loudspeakers Ltd.

B&W DM5



**The compact loudspeaker system
with optimum performance**

**Designed for the critical home user who must
consider limitations of space and cost**

B&W DM5

The DM5 takes its place in the B&W range as successor to the D5, the small B&W speaker that gained an enviable reputation for out-performing loudspeaker systems of two and even three times its size. Our original intention was merely to improve the appearance, since world opinion was more than pleased with its performance; but things worked out rather differently. In the event, we found it possible to embody in the DM5 improvements in almost every area of speaker design.

At the time, we were engaged in a development programme for our DM6 system, and some of the refinements built into the DM5 are related to that. For example, the high-frequency unit is identical to that used in the larger system.

Another outstanding feature is the extremely low system resonance and 'Q'. Typically, the DM5 gives a system resonance of some 53Hz and a 'Q' of below 0.75; these are figures that would do credit to a loudspeaker of several times this size. They have been achieved by redesigning the bass/mid-range unit, employing new suspension materials, and by slightly increasing the enclosure volume as compared with the D5. These refinements make a vital contribution to the useful extension of low-frequency performance.

This is a system that will perform well when tightly coupled in typically restricted domestic conditions—whether standing on bookshelves for example, or wall-mounted.

The low 'Q' quality means that the bass will not be too resonant or boomy.

In short, the DM5 produces a big sound from a small enclosure. The success of this technical achievement is matched by its clean lines and a choice of attractive finishes to blend or contrast with virtually any scheme of decor.



Each DM5—indeed every loudspeaker B&W produce—is individually tested in our anechoic chamber and leaves the factory with its own calibration certificate.



In the B&W unit assembly shop, DM5 bass/mid-range units can be seen beside the third work station.

B&W DM5 Some opinions from the specialist press

“The DM5 emerged as one of the top performers irrespective of price...least costly system in the group...the DM5's certainly represent a bargain.”

HI-FI FOR PLEASURE

“Compared to our best speakers, the DM5 shone through like a sonic beacon, always pleasing us with its exceptional balance, admirable fidelity, and impressive naturalness.”

“...if you have a normal-sized listening room and an outstandingly discriminating pair of ears, by all means invest in a pair of these delightful speakers. You owe yourself an audition at the very least.”

SOUND (Canada)

“We were impressed with the DM5 in our music audition. The sound quality belied its tiny size...The sound was clean, the definition good and...the bass response was quite surprising.”

“The DM5 ranks very high on our list of small, high quality, high-fidelity speaker systems.”

STEREO (U.S.A.)



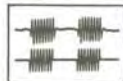
B&W DM5

Here then is the small-space speaker, designed for shelf- or wall-mounting. But small only in terms of size, because it consistently out-performs much bigger and costlier makes in both test and home conditions.

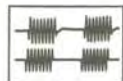
Generally speaking, there's little to choose between the performance of most small loudspeakers, but the minute you hear the DM5 you will recognise that this small system is in a class of its own. And this is not just subjective opinion, as a glance at the review quotes on page 4 will confirm. Incidentally, the press has also commented very favourably on the excellent finish of the DM5 cabinet.

Before going into specification details, it is well worth mentioning that the DM5 is also an excellent second speaker system, for use in another room, or as back-up in a four-speaker installation.

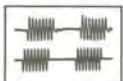
TONE BURSTS



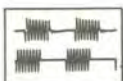
125Hz



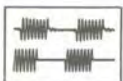
250Hz



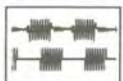
500Hz



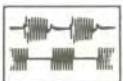
1kHz



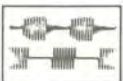
2kHz



4kHz



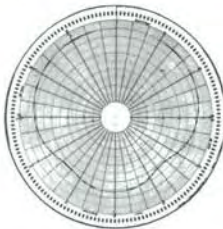
8kHz



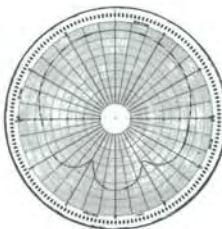
16kHz

POLAR RESPONSE

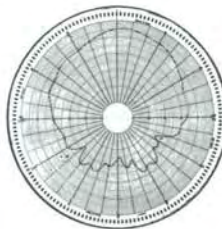
Horizontal distribution of sound for a range of frequencies



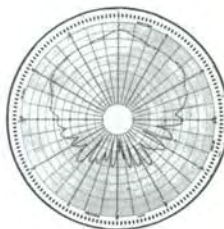
500Hz



1kHz



5kHz



10kHz

DRIVE UNIT COMPLEMENT

Both the drive units were designed by us and are made in our own factory.

HIGH-FREQUENCY DRIVER



Unit B&W TW20. Voice coil diameter 19mm. Dome formed of polyester weave. Total moving mass 0.17gm nominal.

As we have already said, the HF unit is the same as that in the DM6. It offers what is probably the best transient behaviour of any comparable unit world-wide. Linear extension of the frequency response is to at least an octave above audibility.

BASS/MID-RANGE DRIVER



This is the B&W 150/M5 unit. Effective cone diameter 140mm. Voice coil diameter 26mm. Free-air resonance 40Hz. Flux density 1.2 Tesla nominal. The unit is loaded with a highly-damped sealed enclosure.

Until comparatively recently, a really satis-

fying bass response was obtained only from free-standing enclosures of say 50 to 60 litres. For most home listeners, that effectively rules out a really faithful reproduction of original sound, because they simply haven't enough space. Now, in the DM5, a mere 19 litres reproduces the whole musical spectrum from the lowest organ pedal note to the transient attack of a cymbal crash.

CROSSOVER UNIT



Crossover frequency 4.5kHz with third order filter network employing close tolerance components throughout and polyester (not electrolytic) condensers.

FREQUENCY RESPONSE

± 5dB 100Hz to 20kHz (free field).

SENSITIVITY

7.4 volts r.m.s. for a s.p.l. of 95dB at 1 metre.

POWER HANDLING

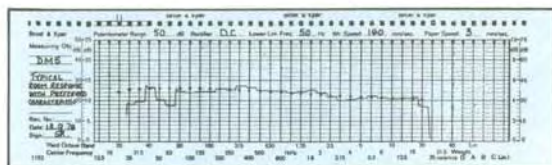
Suitable for amplifiers 10 to 25 watts r.m.s. into 8 ohms (music content).

OVERLOAD PROTECTION

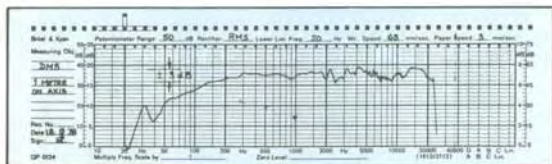
2 amp fuse protects the system.

1. Crossover mounted on specially designed plate together with system protection fuse.
2. Large cross section ferrite-cored inductor reduces distortion and ensures optimum amplifier damping to drivers.
3. High-frequency unit (designed originally for DM6) has optimum transient behaviour and level extension of frequency response to at least an octave above audibility.
4. Bass/mid-range unit designed to give extended low-frequency response in a small enclosure.
5. Cabinet constructed from high-density particle board. All internal surfaces bonded with bituminous pads to eliminate resonances.
6. Critical amounts of absorbent material, selected to give optimum damping.

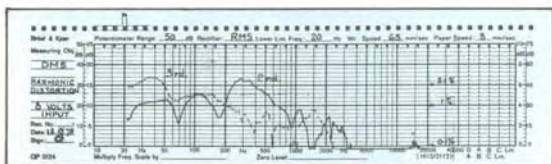




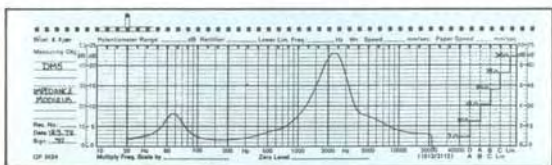
One-third octave room response and preferred characteristic



Free-field response on measuring axis at 1 metre



Second and third harmonic distortion



Modulus of impedance

Height
455mm (18in)

Width
227mm (9in)

Depth
241mm (9½in)

Weight
9.5kg (21lb)

Cabinet construction
High-density board
and mechanical
dampers on panel laminate

Cabinet finish
Standard:
selected veneers of
teak or walnut

Special:
satin white or selected
veneers of rosewood
or black ash

B&W Loudspeakers Ltd reserve the right to amend details of their specifications in line with technical developments

B&W Loudspeakers

Meadow Road Worthing West Sussex BN11 2RX England

