



u s e r m a n u a l

DM600 IFS

INTRODUCTION

The DM600 IFS is designed to operate as a centre channel speaker for home cinema installations and will enhance the localisation of film sound when used with a suitable decoder.

This speaker shares common acoustic and styling features with other models in the DM600 range, but this does not preclude its use with other speakers.

Please take time to read these instructions in order to obtain the best possible performance from your home cinema installation.

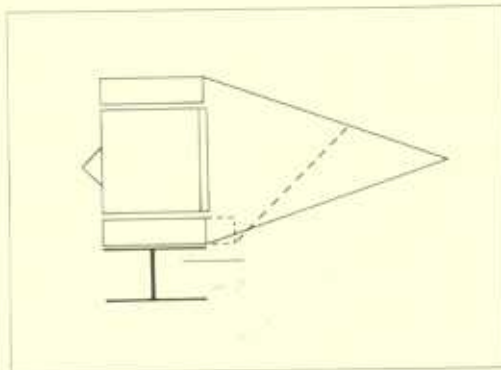
LOUDSPEAKER POSITION

The ideal position for a centre channel speaker is in line with the centre of the screen. However, unless a projector television is being used with an acoustically transparent screen this application will not be practical.

With conventional or widescreen televisions, the speaker will be positioned either immediately above or below the screen, with the front panel of the speaker approximately in the same plane as the screen. The DM600 IFS features ZMF (Zero Magnetic Field) Technology which means that it can be placed next to a cathode ray screen with no discernable distortion of the picture.

The choice of above or below screen positioning will depend on the height of the screen relative to the audience. Choose the position which brings the speaker closest to ear height. The broad vertical dispersion of the speaker will allow virtually all applications to be accommodated. (See Fig.1).

If you use a very large screen you may notice that sounds move vertically as they pan across the screen due to the difference in height between the centre channel speaker, and those to the left and right of the screen. The use of two centre channel speakers, one above and one below the



The proximity of the lower IFS centre channel speaker to the floor alters the acoustic characteristics and output of the speaker. To achieve the ideal listening position the lower IFS speaker can be moved backwards until the desired sound focus is arrived at.

screen will restore the sound image to the centre of the screen – much in the same way that a normal pair of stereo speakers creates a centre stage sound image.

ELECTRICAL CONNECTIONS

All connections should be made with the equipment switched OFF.

The 600 IFS should be connected to the output terminals of the power amplifier fed with centre channel information (see your decoder user manual for further details).

Use twin cable that has a suitably low impedance (see below) and preferably with one of the conductors marked for polarity indication. The exact type of cable will depend on the length of run which should be kept as short as possible. Your dealer can advise on suitable types.

The speaker terminals will accept 4mm banana plugs or bare wires up to 4mm (7/32in) diameter. Loose or dirty contacts will impair the sound quality. If using banana plugs, choose a good quality sprung or expanding type. Always firmly tighten the terminal caps. Even if using banana plugs loose caps can rattle or buzz. It is good practice to remake connections periodically to ensure they remain sound.

With bare wire connections, if necessary cut off the old ends and strip back the insulation to expose clean conductor.

SINGLE CENTRE SPEAKER INSTALLATION

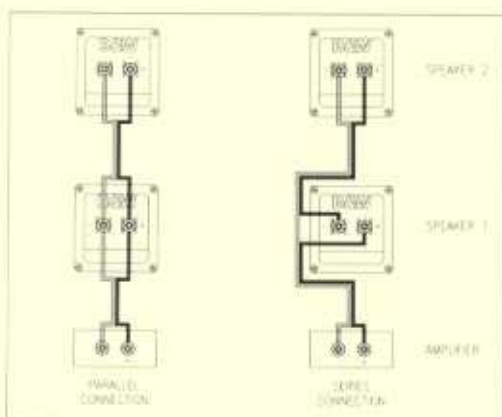
Connect the red terminal of the speaker to the positive terminal of the amplifier and the black terminal to the negative. Failure to observe the correct polarity will result in a loss of bass, phase distortion and imprecise location of sounds as they pan across the picture.

DUAL CENTRE SPEAKER CONNECTION

There are two alternative methods of connection – parallel and series. (See Fig.2). Each has its own merits.

Parallel connection increases the sensitivity by 6dB compared to a single speaker. To produce the same loudness, half the voltage is required with the same current. However, because the load impedance presented to the amplifier is halved, current overload may occur before audible voltage clipping at high levels. Depending on the type of amplifier this may result in the amplifier protectively turning off, an output fuse blowing or, in unprotected amplifiers, damage to the output devices.

To use this method of connection the amplifier must be capable of driving a 4 ohm load.



Series connection gives the same sensitivity as a single speaker and therefore the voltage requirements are the same. The load impedance presented to the amplifier is 16 ohms and half the current is drawn.

If you are in any doubt about the current capabilities of your amplifier, use this method.

After connection and final siting of all speakers, the system must be balanced. Dolby Pro Logic® decoders have an internally generated noise signal for this purpose.

Adjust the levels to all three front speakers as detailed in your decoder user manual to ensure the sound level is the same from each speaker.

ANCILLARY EQUIPMENT

Whilst we cannot recommend specific equipment, there are one or two guidelines that should be followed.

The required power output of the amplifier will depend on the size of the room and the maximum sound level.

In general, a large amplifier used sensibly is safer than a small one which may be driven into clipping.

To maintain consistency of sounds as they pan across the picture, it is best to use the same model of amplifier as used for the left and right front speakers.

AFTERCARE

Loudspeakers require little maintenance beyond keeping them clean. The cabinet may be wiped using a soft cloth. Avoid chemical cleaning agents which may damage the surface finish. The grille may be dusted with a brush. It is advisable to remove the grille during cleaning to avoid damage to the drive units. To remove the grille, grip it at each end and pull away from the cabinet.

SPECIFICATION

DESCRIPTION

3-way, 4th-order vented-box system for centre channel use in home cinema systems.

DRIVE UNITS

Two 120mm (5in) dia bass/midrange units with injection moulded reinforced poly-propylene cones, welded joint low-hysteresis rubber surrounds and 25mm (1in) dia high temperature voice coils on aluminium formers. One 26mm (1in) dia high-frequency unit with ceramic coated alloy dome and magnetic fluid cooled voice coil.

FREQUENCY RANGE -6dB at 62Hz and 30kHz

FREQUENCY RESPONSE ±3dB 75Hz-23kHz

REFERENCE AXIS

From centre of high-frequency unit, normal to front baffle.

SENSITIVITY 88dB spl (2.83V, 1m)

NOMINAL IMPEDANCE 8Ω

CROSSOVER FREQUENCY 3kHz

INTERNAL VOLUME 9.5 litres

POWER HANDLING

Suitable for amplifiers with 25W to 120W continuous output into 8Ω on undistorted speech and music programme.

DIMENSIONS

Height 151.5mm (6.0in)
Width 450mm (17.7in)
Depth 245mm (9.7in)

NET WEIGHT

6kg (13lb)

MAXIMUM RECOMMENDED CABLE LOOP IMPEDANCE

Single speaker configuration 0.4Ω
Dual speaker parallel configuration 0.2Ω
Dual speaker series configuration 0.8Ω

*B&W Loudspeakers Ltd reserve the right to amend details of their specifications in line with technical developments.
B&W, DM and BN are trademarks of B&W Loudspeakers Ltd.
© Copyright B&W Loudspeakers Ltd 1993.
Printed in England*



BW002

Live at the Montreux Music Festival - 1988



BW004

Live at the B&W Montreux Music Festival - Vol. 1



BW005

Live at the B&W Montreux Music Festival - Vol. 2



BW006

Live at the B&W Montreux Music Festival - Vol. 3



BW008

Hugo Viggiato Songs of the Singspiel



BW009

Rolf Schimmernann Solo



BW012

Roy Russell Children



BW013

Nano Siroguelin God's Dream



BW014

Hungarian Rap Art Orchestra Highlights of the Milky Way



BW015

Blue Jazz Live at Montreux



BW016

Rakauskas Live at Montreux 1987



BW017

Rolf Schimmernann The Jerusalem Album



BW018

Max Lüsser's Ark A Different Kind of Blue



BW019

Charlie Mariano Quartet Western Beat De Young



BW020

Briguen Doron Eight Moments



BW021

Pratael Fero Musicum



BW022

Doris and Dan Brubeck Gathering Forces I



BW023

Doris Brubeck and the NU Jazz Connection African Tributes



BW024

Arbuck/Thom Alex Cool Enough Live at the New Orleans Jazz & Heritage Festival 1990



BW025

Counterculture Air Ghetto



BW026

Mark Jefferts Talk to Me



BW027

LSM Live at the ZMF Freiburg



BW028

Tony Portrane Trio Electric Poetry



BW029

Peter Siger Trio Jazz



BW030

Fourth World Fourth World



BW031

Peter Siger Acoustic Blues Europe



BW032

Hains Affalter Choro Abon



BW033

Across All Areas The Best of B&W



BW034

Hains Affalter Acoustic Adventures



BW035

Hains Affalter Acoustic Realities

