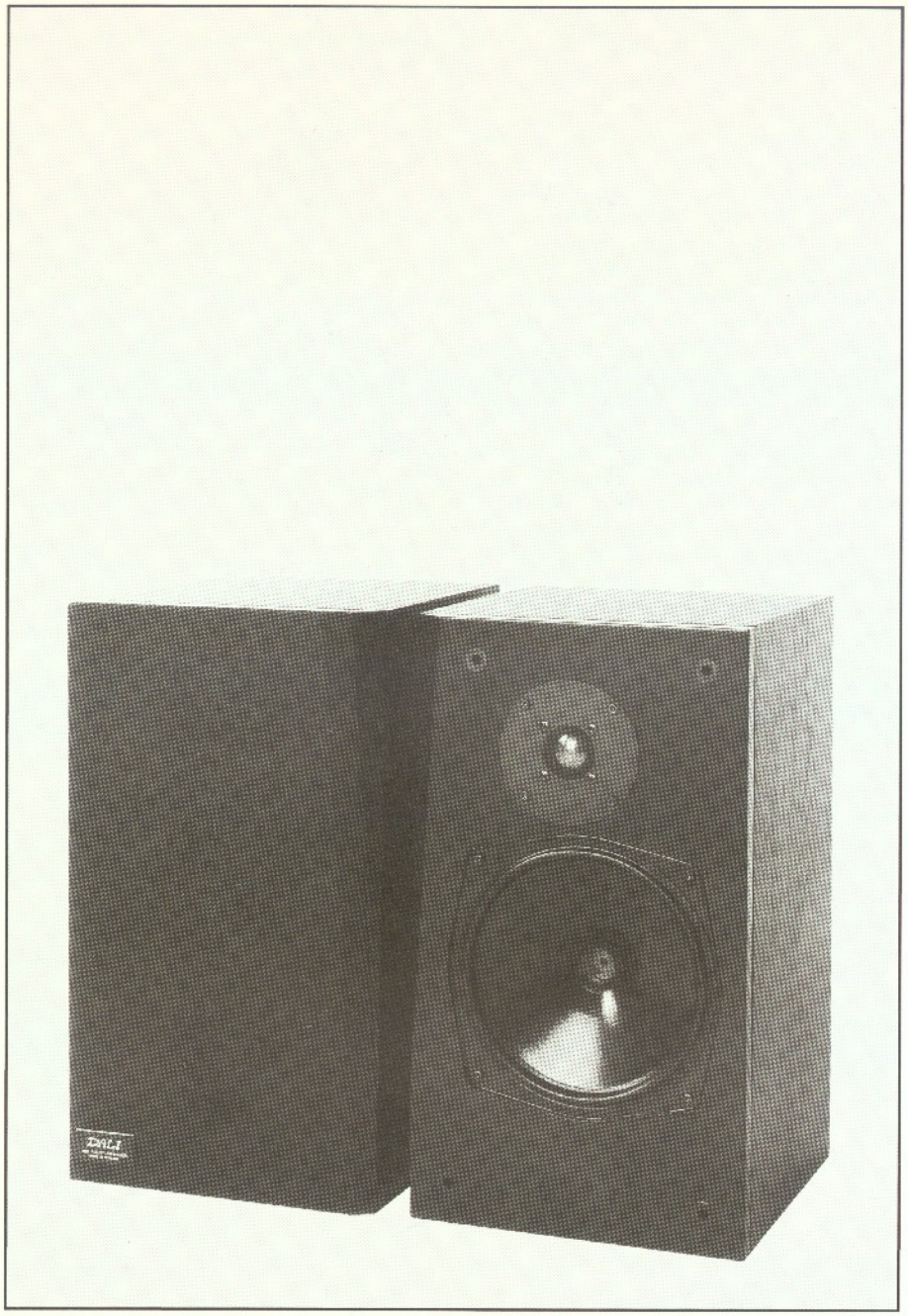


DALI

3b

FEATURES:

- Woofer with long excursion
- Woofer vented through the pole piece
- Woofer diaphragm with well-controlled partial oscillations
- Woofer with well-controlled rubber suspension
- Dome tweeter with 1-inch metal dome
- Dome tweeter with combined core-and-bottom plate
- Dome tweeter with very smooth sound radiation
- Linear-directivity cross-over network
- Crossover network with metalised polypropylene capacitor
- Crossover network with well-dimensioned coils
- Internal Wiring with LC-OFC-cable
- Cabinet of heavy duty particle board and MDF-board
- Gold plated terminals for thick leads or banana plugs
- Extremely linear frequency response
- Low distortion
- Impedance curve constitutes an easy load to most amplifiers
- Surface in genuine exquisite mirror-imaged veneering

HIGH FIDELITY LOUDSPEAKERS — MADE IN DENMARK

HORBO OFFSET - 09.52.02.14

DALI 3b

The original DALI 3 was selected »Loudspeaker of the Year« for 1985 by the Danish magazine »Hi-Fi & Elektronik« and received rave reviews in American, Australian and Japanese journals. Its successor, DALI 3a tops the list in »Hi-Fi & Elektronik's« rating of the performance, finish and affordability of loudspeakers reviewed in 1988. The DALI laboratories are engaged in an ongoing research and development programme, not only with regard to new products, but also to seek out possible areas for improvement in our current models. In the case of the DALI 3b, significant improvements have been achieved in major areas in a process of evolutionary development, while retaining all the qualities which made the DALI 3a unique.

The DALI 3b incorporates the same 8" woofer as the DALI 3a, where much attention has been paid to the diaphragm, the most critical component in a driver. An 8" driver capable of perfect pistonic motion up to 3 kHz is a physical impossiblity. This is analogous to the motion of a rope on the ground when one end is flicked - the wave movement through the rope is transmitted at a finite speed and ends with a flick at the other end. This is how oscillations in a driver diaphragm are propagated. The movement starts at the voice coil and ends with a »flick« at the roll suspension. Two things now need to be achieved: 1) the transmission of the sound wave through the diaphragm should not be faster than from the voice coil through the air and 2) the »flick« at the rim should be damped to such an extent that the edge suspension should cancel it. The first point requires the sound velocity in the diapragm material to be independent of frequency and to fit the angle of the diaphragm relative to the voice coil. The second point calls for controlled damping of the diaphragm material as well as frequency independence, with high damping via the roll suspension.

Following many calculations and much testing, we managed to control partial oscillations in the 8" driver. It features a very expensive surface treated paper diaphragm, terminated with a rubber roll surround. The result is a woofer with linear response up to 4 kHz and very well controlled roll-off above this frequency. To make this driver suitable for the 19 litre sealed cabinet, the suspension is extremely compliant, facilitating a driver with 8 mm linear excursion. The result is a bass system with a Q of .7 providing best possible definition and transient response.

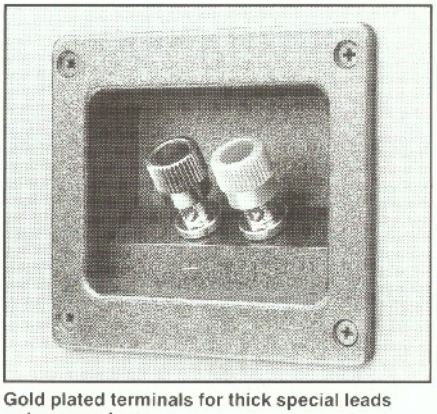
A newly developed 1" duraluminium metal dome covers the treble range. One of the many advantages of this material is its perfect pistonic characteristics over the entire audible frequency range, unlike the more common cloth and synthetic domes which typically have break-up modes beginning at 10-15 kHz. A metal dome offers exceptionally neutral response, amazing clarity and an abundance of detail. The metal dome is mounted directly on the voice coil, for the best transfer of energy and for improved heat dispersion which contributes greatly to the driver's increased power handling capability.

The magnet system is a powerful low loss type with a solid core and bottom plate.

It is well known that high quality drivers do not require complicated crossover networks. The crossover of DALI 3b reflects a sound design philosophy; that is to use only what is necessary and make it of the highest quality. The fairly simple crossover of DALI 3b contributes to the fine frequency coherence, phase relationship and even dispersion (even at extreme angles). A precise stereo image is achieved through the use of high quality inductors and metallised polypropylene capacitors.

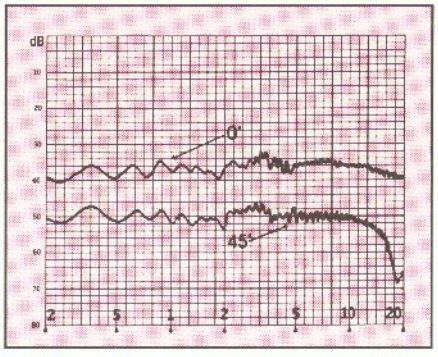
Like every DALI loudspeaker, the cabinet for the DALI 3b is manufactured to the highest standards of Danish furniture craftsmanship, and improves on the high standard set by its predecessor. The front baffle is cut from 22 mm massive MDF (Medium Density Fiberboard) which, in addition to its greater mass when compared to ordinary particle board, also offers improved internal damping. The cabinet has been reinforced based on the results of modal analysis which helped to define and refine the structural integrity of the cabinet. The objective of the cabinet construction is to eliminate low Q resonances, which have been proven to be the most annoying. The sides and rear of the cabinet are cut from the finest particle board with an impressive surface finish. Through careful placement of the drivers and special attention to the shape of the bevelled grill frame, the DALI 3b achieves what every serious manufacturer dreams of, but rarely accomplishes; the audible and measureable performance of the DALI 3b are identical, with or without the grill frame. The multi-way terminals on the DALI 3b accept banana plugs, spade lugs and heavy-duty cable.

The end result is a loudspeaker whose sonic performance and appearance make it a more than worthy heir to its popular predecessor.

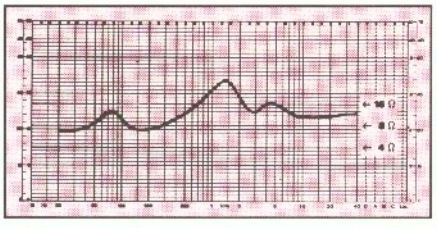


Gold plated terminals for thick special leads or banana plugs.

SPECIFICATIONS:



Total frequency response and response of tweeter and woofer. Crossover frequency is 3.000 Hz.



Input impedance.

Cabinet type	Closed
Drivers	8" Bass/midrange 1" Dome tweeter Metal dome.
Crossover frequency	3000 Hz, asymmetrical
Impedance	8 ohms
System resonance	65 Hz
Frequency response ± 3 dB	50-20,000 Hz
Sensitivity (2.8 V)	90 dB/1m
Recommended amplifier power ratings:	15 to 100 W/channel
Dimensions:	
Height	17¼ in (44 cm).
Width	10 in (25 cm)
Depth	10¼ in (25.8 cm)
Net weight	8 kg
Shipping weight	9 kg

Design and specifications are subject to change without notice in the course of product improvement

Dealer:

HIGH FIDELITY LOUDSPEAKERS MADE IN DENMARK