Danish Audiophile Loudspeaker Industries

ENTERTAINER

The DALI 450 excels in every aspect of musical performance thanks to the intensive efforts of the DALI research and development staff. Custombuilt close-tolerance drivers contribute to the neutrality and transparency of the DALI 450, an amplifier-friendly, efficient floor-standing loudspeaker designed to blend in effortlessly in modern interiors.

The relatively narrow front, sloped edges and sloped grille reduce diffraction phenomena to insignificant levels. The 25 mm thick front baffle offers a non-resonant environment for the drivers. The partition between the two bass reflex chambers also provides additional internal bracing and vibration control for the entire cabinet.

Dual Reflex System

DALI 450 employs a pair of identical 6 1/2" bass/midrange drivers which occupy separate and independently tuned bass reflex enclosures. While one driver crosses over at 4 kHz, the other rolls off gradually above 550 Hz, still offering useable output at the nominal system crossover point, 4 kHz. The carefully defined overlap and highly specialized interaction between the two drivers compensate for the inevitable drop in output from any loudspeaker with a narrow front baffle. The dual-driver configuration maintains system linearity with no loss in efficiency and reinforces the tunefulness and solidity of the bottom octaves.

The implementation of twin bass/midrange units also doubles the available surface area, allowing the DALI 450 to reproduce music with a forceful authority and relaxed ease that by far surpasses the performance of speakers of comparable price or size.

The custom designed drivers incorporate low-loss surrounds, special coated pulp diaphragms and an ingenious motor assembly construction for long, linear throw and a clearly audible reduction in distortion across the unit's operating range.

The bass/midrange units offer fast impulse response and excellent rendering of low-level detail, regardless of overall volume setting.

High Frequency Driver

The exceptional linearity of the 6 1/2" drivers permits a high 4 kHz crossover to the 1" tweeter, placing the transition point well above the crucial midband and considerably reducing the work to be done by the tweeter.

A unique coating process surpasses normal surface treatments by fully integrating the coating with the diaphragm itself for improved resonance damping. This eliminates the need for ferro-fluid, offering significant improvements in transient response. A substantial damping chamber behind

the dome shifts the resonant frequency well outside the driver's operating range.

The tweeter also incorporates a center cover which eliminates distortions normally generated by uncontrolled flexing at the diaphragm's unsupported center.

These factors are the secret behind the smooth, extended and uncolored high frequency response of the DALI 450.

Advanced

Crossover Technology

High-quality loudspeaker design involves a crossover which provides not only linear frequency response, but also correct phase and perfect timing between the drivers. Consequently, the drivers in the DALI 450, in collaboration with the crossover, offer outstanding transient response and a highly linear impedance without the aberrations typically found in ordinary designs at the crossover point.

The DALI 450 crossover incorporates select high-quality crossover components hard-wired for optimum electrical contact and includes separate low-frequency and high-frequency input terminals for bi-wiring or bi-amping in order to extract the ultimate in precision and dynamics. We recommend the use of identical or sonically similar cables in order to maintain the seamless coherence of the DALI 450.

When used with high quality source components, the DALI 450 will present a virtually three-dimensional image of the original musical event.

Specifications

Cabinet type.......Bass reflex x 2
Crossover frequency....550/4,000 Hz
Nominal impedance......4 ohms
System resonance.......33 Hz
Frequency response.....38-20,000 Hz

