





DALI 810

The best of both worlds

The DALI 810 is the best of both worlds; the flash and power to match contempo-rary popular music and the delicacy to suit classical genres from solo recitals to the full majesty of a symphony orchestra. The development of Dali 810 required the rethinking of some fundamental principles of loudspeaker design.

The DALI 810 incorporates such essential DALI technology as our special low-loss rubber surround and our exclusive Linear Directivity crossover. The low-loss surround enables the units to reproduce the tiny details that are of crucial importance, if the speaker is to visualise a realistic soundstage. The Linear Directivity crossover ensures linear frequency response even at extreme angles off-axis for the optimum speaker/room interface.

Bass and midrange drivers

To achieve a seamless integration of drivers, the Dali 810 driver diaphragms are constructed from materials of similar acoustic character. All drivers have die-cast magnesium baskets with powerful, linear magnetic systems. The 8" woofer and the midrange unit are based on coated paper diaphragms and the 5" midrange has a phase plug for smoother sound wave propagation. Both drivers have ventilated pole pieces to eliminate compression, and the 8" woofer has a 40mm long-throw voice coil. Our special low-loss rubber surround offers outstanding linear impulse response at both high and low levels. To achieve natural deep bass extension and weight, the 8"

unit is assisted by a 6 1/2" unit in its entire frequency range. The 6 1/2" unit is placed in its own 18 litre cabinet close to the floor, making it as efficient as the 8" unit. For this reason the 6 1/2" is capable of delivering the same sound pressure level as the 8" unit, giving the Dali 810 the same authority as a much larger speaker with two 8" units, but in a reasonable sized cabinet.

Dual tweeter assembly

The ultra-lightweight 2" cone tweeter with a 14mm voice coil in a substantial magnetic assembly takes over above 4kHz. The cone's large surface area and small moving mass ensure a unique level of resolution and dynamic capability. With four times the surface area of a 1" dome tweeter, this unit offers an additional 12dB of dynamics. To ensure proper dispersion in the high frequency range, the DALI 810 includes a ribbon tweeter which augments the output of the cone tweeter above 10kHz. The outstanding dispersion and negligible moving mass of the ribbon contribute significantly to the airy, open, detailed treble of the DALI 810. The cone and the ribbon tweeter are matched for optimum precision.

Crossover network

To achieve optimum performance from the drivers, the crossover incorporates only the finest components in the signal path, such as metal alloy polypropylene capacitors and air-core inductors wound from high purity, heavy-gauge wire. Research has shown that as impedance varies with

frequency, most amplifiers tend to sound aggressive and edgy. For these reasons, the crossover in the DALI 810 is optimized for an even, frequency-independent impedance curve which allows any amplifier to perform at its best.

Enclosure

Extensive use of modal analysis in the DALI laboratories has documented the need for damping of resonances from enclosure surfaces.

One important factor is the rigidity of the front baffle. For this reason the DALI 810 has the narrowest possible front made of 25mm particleboard for maximum rigidity. Extensive internal bracing further reinforces the enclosure's immunity to vibration.

The inevitable diffraction effects that do arise are effectively absorbed by a layer of felt. The absence of diffraction allows a significant improvement in the stability and focus of the stereo image. For listeners who prefer to use the DALI 810 with the front grilles in place, the frames are carefully designed to minimise diffraction which detracts the precision of the stereo image.

Connections

The gold-plated terminals of the DALI 810 accept banana plugs as well as heavy-gauge bare wire. Two sets of terminals are provided for easy bi-wiring or bi-amping for a further enhancement of musical performance. Gold plated clamps are provided, should you choose not to avail yourself of the bi-wiring/bi-amping option.

Specifications:	cifications:	
Cabinet typeBass reflex	Continuous power handling150 Watt	
Crossover frequency:	Peak power handling200 Watt	
700Hz, 4kHz, cone tweeter active above 10kHz	Sensitivity92dB (2.83V/1m)	
Nominal impedance4-8 ohms	Dimensions (HxWxD)104x29.4x38cm	
System resonance32Hz	Weight	
Frequency response +/- 3dB32-30,000 Hz		

