

L Classic Series
Performance that goes beyond the scale of its dimensions

QUAD

the closest approach to the original sound





L Classic Series

According to Quad's philosophy, high fidelity equipment should add nothing to, nor remove anything from, the recorded sound. All Quad L Classic loudspeakers are designed following that tradition.

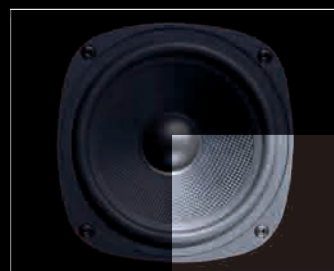
Because we manufacture every part of every loudspeaker in our own factory, our designers and engineers have absolute freedom in developing and experimenting with new designs and materials. We can create a product with each part honed to form a perfect symbiotic relationship with every other part. This is why, with Quad products, the whole is always much greater than the sum of the parts.

Quad L Classic loudspeakers employ the format and characteristics of their award-winning forebears, but in formulation and construction this series offers a major advance in performance. Tonally balanced to suit all music genres and virtually unrivalled in the ability to retrieve all nuances captured by recording engineers, L Classic loudspeakers are thoroughly musically involving for the listener and perfectly follow Quad's tradition of *'The Closest Approach To The Original Sound'*.





The L Classic Technology



Kevlar Cone Driver

L Classic's long-throw Kevlar driver is manufactured using our proprietary bi-directional Kevlar weave, made from a self-damping resin-impregnated fibre form of the material that is then lattice woven to create the appropriate stiffness, strength and weight, and later formed into a cone and mounted on a butyl rubber surround.



Driver Integration

The L Classic tweeter utilizes a precision-engineered waveguide to integrate the midrange and treble in a totally coherent way. The motor system of the bass-midrange unit has been critically aligned for improved linear motion and low distortion. Acoustically the drive units are combined by an advanced phase-linear crossover utilizing low distortion inductors and high clarity polypropylene capacitors in the signal path. Phase coherency is particularly important to ensure the bass integrates perfectly with the treble, and of course to create a truly holographic stereo image - the hallmark of the classic Quad sound.



Bass-Midrange Driver Technology

A high efficiency, double hand-wound voice coil tracks the signal, with the high-gauss magnet assembly providing momentum for movement. This dual 25mm voice coil of the bass driver is wound on an aluminum alloy carrier or 'bobbin'. This dissipates heat from the central coil region to maintain peak performance and optimum excursion of the long-throw driver. The coils are vented to reduce the effect of any pressure build up in the central cone region. A strong die cast aluminum alloy chassis assembly is an essential part of the design, keeping everything taut and under control, even when encountering large transients and extremes of power.



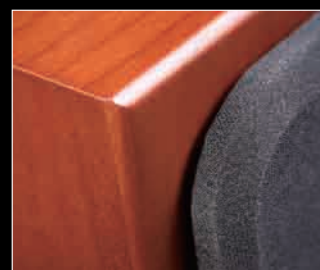
Bi-Wiring

L Classic speakers have two pairs of binding posts for bi-wiring. This involves the use of two pairs of separate cables between the amplifier and the loudspeakers. One connects to the treble unit while the other to the bass-midrange driver. Using separate cables for treble and bass units reduces intermodulation effects while improving headroom and clarity.



Multi-Layer Cabinet Construction

The L Classic range features a multi-layer cabinet construction coupled with additional internal bracing to significantly reduce cabinet coloration and resonance. Special internal long fibre damping is utilized to randomize internal reflections and thus prevent standing waves from forming. The result is that you hear the output of the drive units without interference from the cabinet structure or reflected sound from the internal volume.



Real Wood Veneers and Piano Gloss Finish

L Classic loudspeakers are available in real wood veneer and piano gloss finish options. The real wood veneers are specially chosen and matched for each pair of speakers and then polished to reveal the deep grain pattern and depth of colour. Lustrous piano gloss is applied to each speaker by hand over a period of seven days, each of which involves applying a coat of lacquer which must then dry at an ambient temperature before being cut and polished. The final coat is polished to a high gloss finish to produce one of the finest finishes seen on any loudspeaker in its class.

A Return to Tradition

The Quad 11L Classic follows in the tradition of small, monitor class loudspeakers set by the BBC LS3/5a. This precedent set new standards for accuracy and midband definition when it was first introduced and is still held in high regard by audiophiles worldwide today.

A small monitor loudspeaker has distinct advantages both for near field monitoring and for music reproduction at home. The use of relatively small bass/midrange unit provides the possibility of excellent integration with the treble unit, delivering an accurate power response both on the forward axis and in the room.

As a result this mini-monitor design approach yields an expansive stereo soundstage that belies the size of the speaker itself, and the coherent midband gives lifelike reproduction of vocals and acoustic instruments.

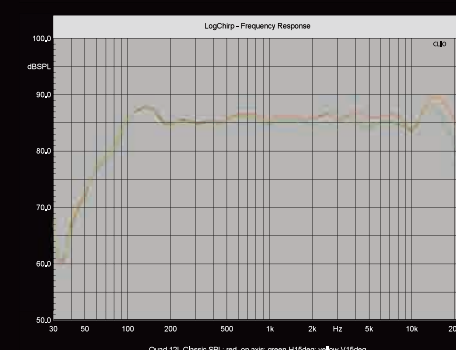
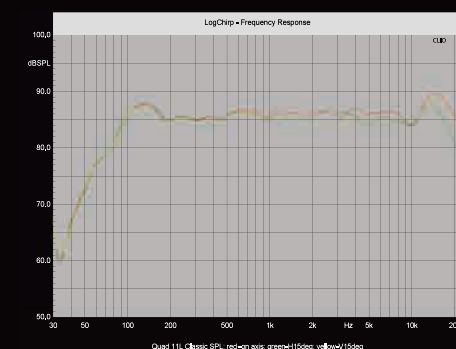
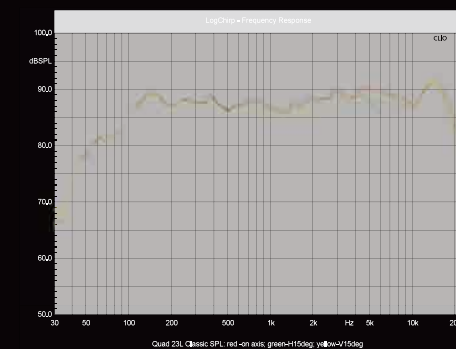
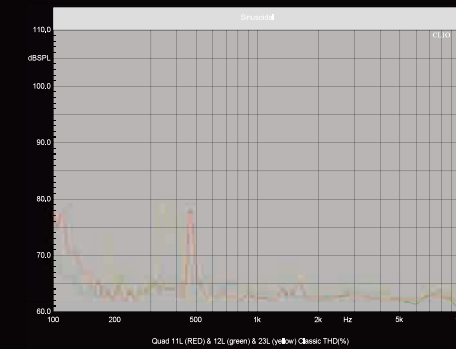
Drive unit integration



Quad 11L Classic has been fitted with an advanced motor system, coupled to the woven Kevlar bass unit cone, which results in much improved linearity and a substantial reduction in midband and bass distortion levels. As a result the speakers will play loud - no longer is the mini-monitor only suitable for small rooms. But of greater interest is the new profile for the treble dome. This takes the form of a shallow horn waveguide that controls the dispersion of the dome to mimic that of the midrange cone through the crossover region.

As a result the crossover becomes almost inaudible in the overlap between the driver units, yielding a coherent, detailed and remarkably lifelike midrange performance in a similar way to the coherence heard from electrostatic panels.

A flat frequency response is only one clue to the monitor-like accuracy. On both horizontal and vertical axes the response is maintained within +/-3dB giving a clue to the excellent power response heard in-room. Reflections from nearby walls, floor and ceiling, which normally skew the acoustic response heard by the listener and which increase coloration, only add to the overall acoustic power and do not distort the perception of the forward response.



QUAD

Cabinet construction

The BBC LS3/5a used a novel approach to cabinet construction to reduce the audible effects of panel resonance. Likewise the Quad 11L Classic also utilizes an intriguing method of reducing both panel resonance and the transmission of sound from inside the enclosure.

A combination of two differing wood materials is used for the carcass of the cabinet in order to reduce the audibility of panel resonance and to make the cabinet more opaque to sound. High density chipboard and fibreboard are laminated together in a structure that breaks up the resonant modes into multiple mini-modal frequency bands that lack the strong sonic signature experienced by more coherent panels such as MDF.

Interior sound from the bass drive unit is partially absorbed by specially selected long-hair acoustic absorbent applied to the cabinet walls. In addition the random particle structure of the chipboard provides a long and diffused path for internal sound that tries to escape from the cabinet. The net result is that cabinet coloration is reduced in all its forms leaving the drive units as the primary sound reproducers.

Crossover implementation

The drive units are combined by a sophisticated but electrically simple passive crossover that is integrated for both phase and frequency through several octaves either side of the crossover point.

Audibly the handover of frequencies between the drive units is seamless whilst the maintenance of phase allows a huge soundstage to be created between and around the speakers.

In order to reduce interaction between the physical components of the crossover, each section is placed on its own PCB mounted separately within the speaker cabinet. This also enhances the benefits of bi-wiring by allowing star-grounding back to the amplifier.

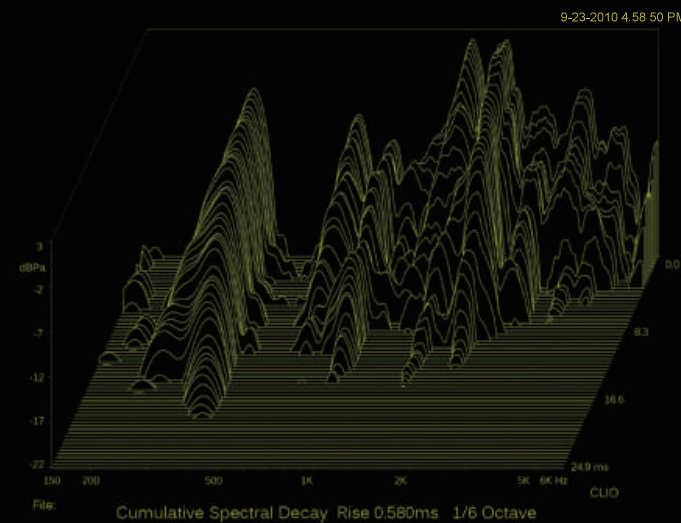
Component selection includes precision wound inductors, with the bass coils utilizing laminated silicon-iron cores for linearity, and polypropylene capacitors in the signal path.



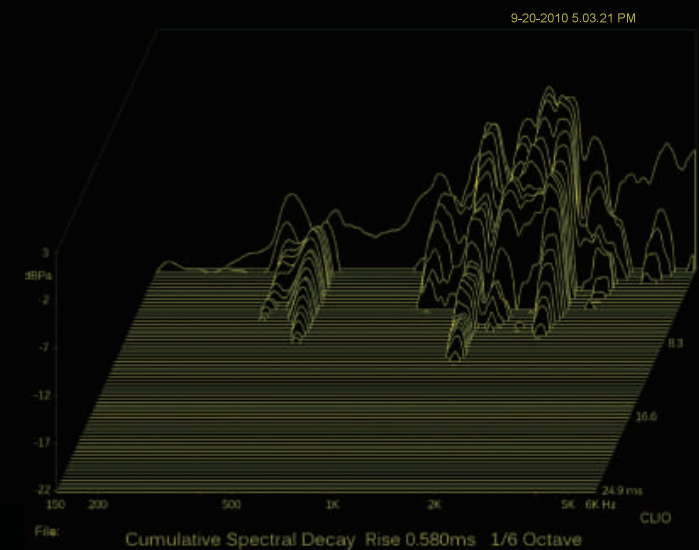
Bass Reflex design

To extend the bass to the lowest octave of sound reproduction the Quad 11L Classic is fitted with twin reflex ports that enable a physical crossover to the bass unit at 68Hz. Below this frequency the twin ports provide majority of the output.

The ports are placed on the rear panel to baffle any effects of airflow distortion and midrange leakage. The use of two ports reduces the velocity of the airflow enabling the speakers to be placed close to a rear wall without problems.



Graph 1. 'Waterfall' Graph of Resonance of an MDF Cabinet Side Panel. Note the strong modes at 350Hz and the high frequency transmission through the panel.



Graph 2. 'Waterfall' Graph of Resonance of the Quad L Classic Side Panel. The strong low frequency modes have disappeared and higher frequency transmission is significantly reduced.



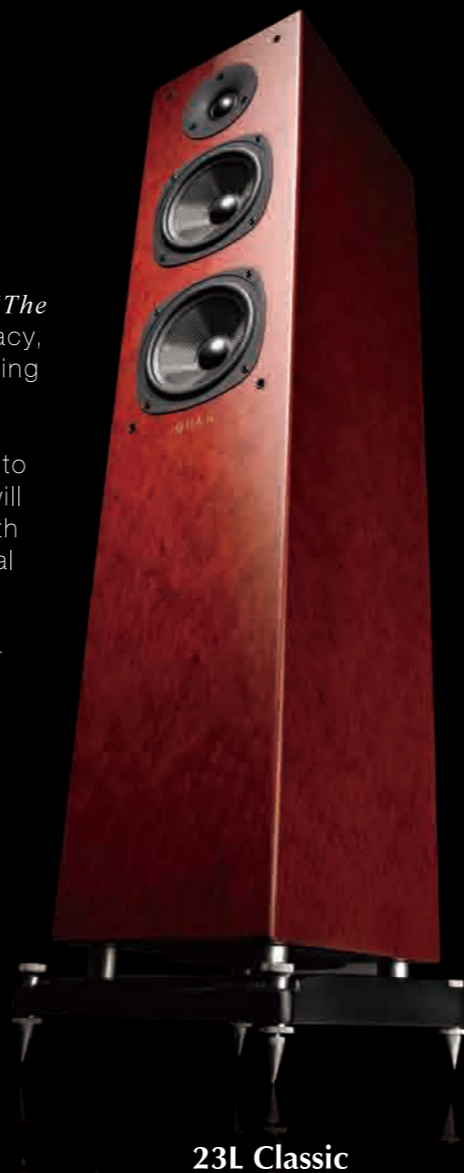
25L Classic

QUAD - A New Classic

In the best Quad tradition the L Classic series follows the dictum *'The Closest Approach To The Original Sound'*. Majoring on timbral accuracy, exceptional detail retrieval and low coloration, the L Classic is everything a monitor-class loudspeaker is meant to be, and more.

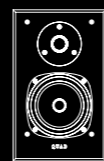
The more is the through enjoyment of music that the L Classic delivers to the listener. It is not critical of musical styles or recordings but will respond enthusiastically to high quality input and reward the listener with a rendition that lends insight into both the recording and the musical performance.

We are certain that the Quad L Classic series will join the small number of monitor loudspeakers that have become classics in their own right amongst hi-fi enthusiasts the world over.



23L Classic

L Classic Series Specification:



Model	11L Classic	12L Classic
General Description	2-way bookshelf speaker	2-way bookshelf speaker
Enclosure Type	Bass reflex	Bass reflex
Midbass Driver	125mm woven Kevlar cone	165mm woven Kevlar cone
Treble Driver	25mm fabric dome	25mm fabric dome
Magnetic Shielding	No	No
Crossover Frequency	2.2KHz	2.4KHz
Frequency Response (+/-3dB)	48Hz-22KHz	48Hz - 23KHz
Sensitivity (2.83V@1m)	87dB	87dB
Nominal Impedance	6 Ohms	6 Ohms
Minimum Impedance	4.2 Ohms	3.8 Ohms
Recommended Amplifier Power	30-150W	50-150 W
Dimensions (H x W x D)	310 x 190 x 263mm	340 x 205 x 279mm
Net Weight	6.3 kg each	7.12 kg each
Standard Accessories	rubber feet, user manual, certificate, gloves	rubber feet, user manual, certificate, gloves

Available Finish colours

Veneer

Classique Cherry

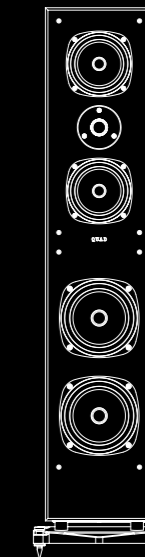
Deep Rose



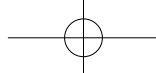
Piano

Classique Cherry

Black



Model	23L Classic	25L Classic
General Description	3-way floorstanding speaker	3-way floorstanding speaker
Enclosure Type	Reflex box with auxiliary bass radiator (ABR)	Reflex box with auxiliary bass radiator (ABR)
ABR	165mm	200mm
Bass Driver	--	2 x 165mm woven Kevlar cone
Midbass Driver	125mm woven Kevlar cone	--
Midrange Driver	125mm woven Kevlar cone	2 x 125mm woven Kevlar cone
Treble Driver	25mm fabric dome	25mm fabric dome
Magnetic Shielding	No	No
Sensitivity (2.83V @ 1m)	88 dB	91dB
Recommended Amplifier Power	50-200 W	50-250W
Peak SPL	110dB	110dB
Nominal Impedance	8 Ohms	6 Ohms
Minimum Impedance	4 Ohms	3.5 Ohms
Frequency Response (+/-3dB)	40Hz ~ 23kHz	35Hz ~ 23kHz
Bass Extension (-6dB)	35Hz	30Hz
Crossover Frequency	450Hz, 2.2kHz	430Hz, 2.6kHz
Dimensions (H x W x D)	925 x 225 x 316mm	1125 x 269 x 348mm
Net Weight	17.2 kg	25 kg
Standard Accessories	spikes, plinth, user manual, certificate, gloves	spikes, plinth, user manual, certificate, gloves



QUAD

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