

# QUAD

*the closest approach to the original sound.*

L2 Series Loudspeakers



Performance  
series



# The Quad Philosophy

Quad has, since the 1950s, led the field in loudspeaker development. The famous Quad electrostatics are now, quite rightly, regarded amongst the very finest loudspeakers money can buy.

With a fifty-strong R&D team, our research into acoustics and reproduction leads the field in development of quality hi-fi equipment. British design and engineering coupled with the industry's most efficient manufacturing facility combine to create products unequalled in terms of value and performance.

Our philosophy is simple - that of producing 'the closest approach to the original sound...'.  
Our philosophy is based upon a belief that hi-fi should add nothing nor remove anything from a recording – merely reproduce it. The resulting sound should be without artefacts, distortion, colouration and truly revealing of the recording process.

Buying a first Quad system is often a revelation to customers. Although neither artificially impressive nor imposing, it will produce a natural performance and an ease of listening that is captivating from the start.

Quad products are sometimes seen as the kind of products bought at the end of a journey through hi-fi; we believe they mark the beginning.



# The Quad L2-Series

L2 is our new entry point into loudspeakers, but these are by no means 'budget' loudspeakers. Using advanced composite driver materials, rare-earth magnets, advanced alloys, quality terminals and finished in a choice of high-gloss, piano-lacquered real veneers, they are fully representative of Quad's commitment to quality and performance.

Voiced for a clean, natural mid-range performance with crisp, clean detail and a taut, punchy bass performance, L2 series loudspeakers excel with well-recorded, complex music scores. The layering of each instrument or vocal texture is clear and precise, allowing the listener to pick out nuances previously overlooked. Providing a 'window' on the recording, the natural tone of the recording is fully preserved to create a real insight into the original performance.

Our manufacturing facility is possibly the world's most advanced in terms of loudspeaker production. From raw material to finished product, the entire process occurs under a single roof. Diaphragm production, voice-coil winding, magnet assembly, PCB printing, crossover manufacture, die-

casting of chassis, terminal plate, terminals, dispersion guide, even the spike assembly all take place in the same building.

Each cabinet is crafted from a eucalyptus based 25mm MDF, using computer controlled precision routers, before being assembled. Every cabinet is unique, finished with a real veneer – not reconstituted wood pulp as other manufacturers use – with seven coats of piano lacquer – each applied by hand, then dried at ambient temperature for 24 hours, then finally hand cut and polished before the next coat is applied. These are fine furniture grade finishes using the same techniques as are used to produce the world's finest pianos.

Whatever your musical tastes, or listening objectives, be they traditional 2-channel or AV, the L2-series loudspeakers will delight and deliver flawless performances, unequalled reliability and remain a stunning centrepiece of your audio system for many years to come. Backed with the support of our famous service department, as with all Quad products, the L2 series represent a very worthwhile investment.

The original L-series entered hi-fi's hall of fame in 2002, with the 11L winning What Hi-Fi? magazine's prestigious 'Product of the Year' Award – an accolade that was repeated the following year, and again in 2004, winning best in class. Around the world the pattern was repeated with major awards from leading magazines on every continent.





# L2 Series Technology

Designing loudspeakers is still very much an art form, yet modern materials and components allow us to push the performance envelope further than ever before.

Neodymium magnets are used in the L2 tweeters. These are a form of 'rare-earth' super-magnet. Because they are so strong and small, when properly employed, they create a very concentrated magnetic field – ideal for the small excursions required for a good high-frequency response.

Whilst most moving-coil tweeters use copper voice-coils, we have developed for the L2 series a new wound aluminium alloy voice coil – capable of higher power handling than the copper equivalent, with better thermal stability and a wider bandwidth. This is largely responsible for the improvements to detail and resolution over the original L-series. A good bass driver chassis design is essential for smooth mid-range. A poor

chassis creates reflections from the cone movement that are passed back through the cone and cause a temporal smearing effect, akin to 'ghosting' of a television signal.

At Quad, we are fortunate as we have the capability of designing and manufacturing any chassis structure. With our own tool shop, die-casting machines, and drive unit assembly plant, we can control the complete process from design to manufacture.

The L2 series uses a new low-profile version of the 4-arc driver chassis used in the original L-series. While the same curved, self-bracing design is used, all the legs are now profiled and narrowed to minimise cone reflections.

The audiophile grade crossover is carefully orientated to minimise magnetic induction and, on bookshelf models, we have added our unique twin port arrangement (designed to reduce distortion by up to 50%).



## Technical Improvements

Metallised Polypropylene low-loss capacitors are used in an audiophile grade crossover. All components are mounted on glass-fibre PCBs with non-interlacing tracks. Perfect layer, air-cored inductors are used, mounted cross-axially to prevent magnetic intermodulation.

Internal bracing is applied to even the bookshelf models now, designed specifically to randomise the internal reflections and cause rapid dissipation of internal standing waves for a clean, fast bass response.

# The theory of Good Design

According to Quad's philosophy a good loudspeaker should add nothing, nor remove anything from the recorded sound. Many loudspeakers on the market adhere instead to a philosophy of extending the high and low frequencies to make an artificially 'impressive' loudspeaker. Such an approach can sound good in the dealer's demo room but is quickly fatiguing and often masks the more subtle nuances of a recording.

Our engineers focus instead on the audible range, ensuring as smooth as possible an integration between bass and treble. This is the most crucial region of any loudspeaker's frequency response. The human ear is at its most sensitive through the

vocal range of frequencies, which is also the range that moving-coil loudspeakers crossover from using the mid/bass driver to the high frequency tweeter.

The art of a good crossover is simplicity, but for other manufacturers the crossover needs to compensate for slight miss-matches between bought in components – Quad doesn't buy in components, we make them all in-house, so our loudspeakers are designed in perfect synergy. Our crossovers are extremely simple and retain all of the precious mid-range detail and purity that can so easily be lost. We use the highest quality components and windings to ensure nothing is compromised.





# Quad Driver Technology

Freedom to create our own chassis designs, means we are able to stretch driver technology to the absolute limits. The new L2 series bass driver chassis is an excellent example of this. Using very low-profile legs, we can virtually eliminate the temporal-smearing effect of rearward waves being reflected back through the cone – it's as if the cone were itself just floating in free space.

The new L2 series tweeter is the first of its kind to use an aluminium voice coil. This provides much wider bandwidth, and hence resolution. Because of its unerring accuracy, a holographic sound-stage reminiscent of the famous Quad ESL is possible. Dispersion is optimised for a real in-room response to ensure that you hear more

of the music as it was recorded and less room effect.

Quad has led the way in producing one of the most remarkable subwoofers for a new generation of audiophiles. The sealed box, exceptional 'tri-lam' driver and powerful amplifier add up to a performance that leaves little to be desired.

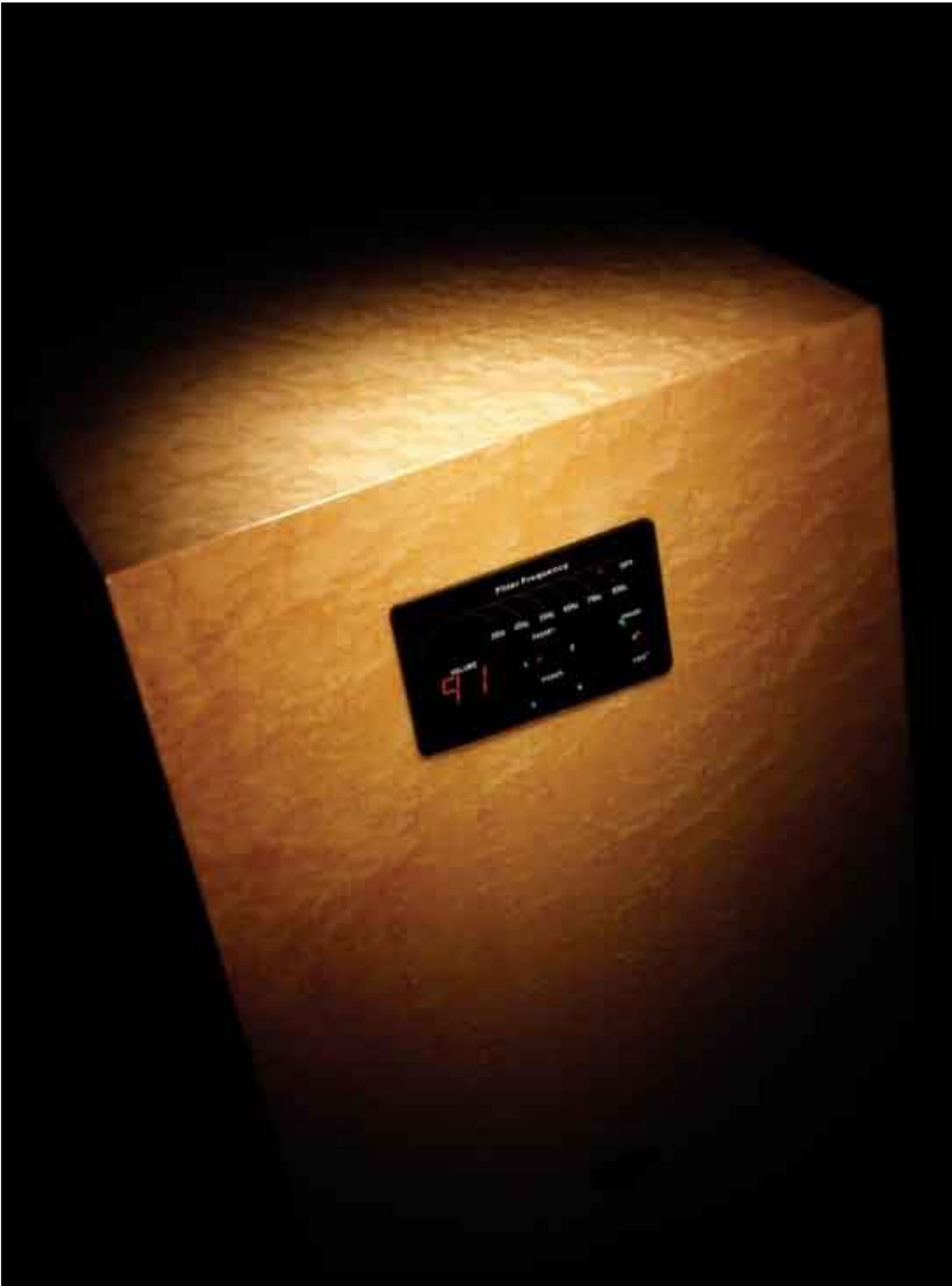
Each subwoofer is also supplied with a full function remote control, allowing the listener to adjust the volume, crossover and phase from the actual listening position. Up to four individual settings can be stored in the memory and can be recalled at the press of a button.



Dual Catenary tweeter dispersion plate – cast from Aluminium, the new tweeter plate enhances the dispersion characteristic, to prevent ‘beaming’ and to widen the listening ‘sweet spot’. Polar response is exceptional with the frequency range, even 45 degrees off-axis, being flat and extended.

This results in a consistently high standard of performance, regardless of where the listener is sat in the room and reduces the effect that room furnishings have on the in-room response.





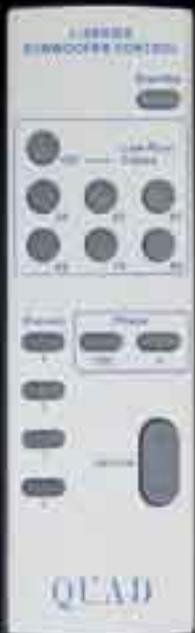
# The L2-Subwoofer Technology

A revolutionary drive unit material is only the start of the technological innovations that make this new Quad subwoofer a fine addition to any surround or stereo system.

The 'tri-lam' cone is a composite construction comprising of a hydraulically moulded and thermoset lamination of three materials. The inner layer is bi-directional weave carbon fibre, the two outer layers are bi-directional weave glass fibre. The outer rim of the cone incorporates rim-edge stiffening within the design. The resulting cone is extremely rigid and lightweight, ensuring very low energy losses, even at extremes of volume, and without the delays associated with high-mass paper pulp or plastic cones commonly used in subwoofer drivers.

Further innovations include a powerful 300WRMS amplifier module coupled with a brand new filter stage. A microprocessor controlled filter section has been developed adjustable between 35 and 85Hz in 10Hz steps – each having a discrete path for the cleanest signal possible.

A full function remote control allows the user to calibrate the subwoofer (crossover, volume and phase) from the listening position and store up to four settings in the memory, which can be recalled at the touch of a button. Finished in the same choice of high quality piano lacquered veneers as the existing L-series models, the L2-subwoofer is as attractive a piece of furniture as it is accomplished as a reference subwoofer.



# L2 Series Specifications

Model	9L2	11L2	12L2	21L2	22L2
Transducer Complement	2 Way				
Bass Driver	4" / 100mm	5" / 125mm	6.5" / 170mm	6.5" / 170mm	6.5" / 170mm
Mid Driver	-	-	-	-	6.5" / 170mm
Soft Dome Tweeter	1" / 25mm				
Nominal Impedance	6 Ohms				
Freq Response +/- 6dB	50Hz-28kHz	45Hz-28kHz	45Hz-28kHz	35Hz-28kHz	30Hz-28kHz
Upper Freq Limit -10dB	32kHz	32kHz	32kHz	32kHz	32kHz
SPL 1W @ 1m	85dB	86dB	88dB	88dB	89dB
<b>Power Handling</b>					
Continuous Programme	75 Watts	85 Watts	100 Watts	125 Watts	150 Watts
Recommended Amp	30 - 120 W	30 - 150 W	30 - 200 W	40 - 200 W	50 - 300 W
System Fb	60Hz	55Hz	50Hz	40Hz	35Hz
Crossover Frequencies	2.2kHz	2.2kHz	2.2kHz	2.2kHz	150Hz, 3.0kHz
Dimensions (HxWxD) mm	248 x 152 x 205	310 x 190 x 243	330 x 205 x 253	780 x 205 x 263	850 x 205 x 278
Gross Weight	9.2kg	12.6kg	15.2kg	34kg	38.1kg
Carton Size (HxWxD) mm	322 x 398 x 258	405 x 313 x 495	440 x 325 x 530	970 x 365 x 630	1035 x 375 x 630

Model	L-ITE Sat	L2 Centre	L-ITE Centre
Transducer Complement	2 Way	2 Way	2 Way
Bass Driver	4" / 100mm	5" / 125mm x2	4" / 100mm x2
Mid Driver	-	-	-
Soft Dome Tweeter	1" / 25mm	1" / 25mm	1" / 25mm
Nominal Impedance	6 Ohms	6 Ohms	6 Ohms
Freq Response +/- 6dB	70Hz-28kHz	70Hz-28kHz	80Hz-28kHz
Upper Freq Limit -10dB	32kHz	32kHz	32kHz
SPL 1W @ 1m	86dB	88dB	87dB
<b>Power Handling</b>			
Continuous Programme	75 Watts	70 Watts	85 Watts
Recommended Amp	30 - 120 W	30 - 150 W	30 - 120 W
System Fb	70Hz	60Hz	75Hz
Crossover Frequencies	2.2kHz	2.0kHz	2.5kHz
Dimensions (HxWxD) mm	225 x 135 x 160	163 x 428 x 206	135 x 340 x 160
Gross Weight	6.2kg	8.8	6.2
Carton Size (HxWxD) mm	278 x 426 x 192	273 x 255 x 505	240 x 191 x 400

## Finishes (all models)



## L-ITE Series Surround Package



## L2 Series Surround Package



Model	L2 Sub	L-ITE Sub
Transducer Complement	Single Tri-Lam Driver	Single Tri-Lam Driver
Bass Driver	12" / 300mm	10" / 250mm
Amplifier Output power	300 Watts	300 Watts
Line Input Sensitivity	250mV for 100W output	250mV for 100W output
Input Impedance	10 kOhms	10 kOhms
Freq Response (boundary)	25Hz-95Hz	25Hz-95Hz
Low Frequency Limit -10dB	32Hz	32Hz
Avg. Max output @ 1m	113dB	108dB
Crossover Range	35-85Hz	35-85Hz (plus bypass)
Dimensions (HxWxD) mm	535 x 345 x 465	485 x 288 x 435
Gross Weight	31.6kg	28.5kg
Carton Size (HxWxD) mm	555 x 470 x 640	418 x 544 x 617

## Quad Product Range

### Reference series

#### Electrostatic Loudspeakers

- ESL - 2805
- ESL - 2905



ESL - 2805

### Performance series

#### Loudspeakers

- L-ITE 5.1 System
- L-ITE Mini Loudspeaker - Pair
- L-ITE Centre Loudspeaker - Single
- 9L2 Loudspeaker - Pair
- 11L2 Loudspeaker - Pair
- 12L2 Loudspeaker - Pair
- 21L2 Loudspeaker - Pair
- 22L2 Loudspeaker - Pair
- L2 Centre Loudspeaker - Single
- L2 Subwoofer - Single
- L-ITE Subwoofer - Single

#### Electronics

- 99 CDP-2
- 99 CD-S
- 99 Pre
- 99 Stereo
- 99 Tuner
- 909 Stereo
- 909 Mono



99 - Pre Amp  
99 - Power Amp

### Classic series

#### Electrostatic Loudspeakers

- ESL - 989
- ESL - 988

#### Amplifiers

- II-forty Power Amplifier (mono)
- II-Classic Power Amplifier
- QC-twenty four Pre Amplifier
- QC-24P Phono stage



Quad II-Forty Power Amp  
QC24 Pre Amp



# QUAD

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