

# ESL 2812 & ESL 2912



QUAD

*the closest approach to the original sound*



Since Peter Walker founded the business in 1936, all Quad products have displayed originality in design, born from a full and proper understanding of every aspect of sound reproduction. A world leader in audio amplifier and electrostatic speaker design, Quad has, over the years, made a major contribution to the improvement of sound quality. This contribution has been recognized by awards from around the world including the Queen's Award for Technological Achievement in 1978 - the only one ever presented to an audio hi-fi equipment manufacturer.

For many people, buying their first Quad sound system can be a life changing experience. They enjoy the confidence of knowing that the

complete system has been engineered to achieve optimal performance, free from compatibility problems. They relax in the knowledge that Quad's legendary service department will give support throughout the system's useful life. They derive pleasure from knowing that Quad is a company of individuals who care about both the design and construction of their products, while sharing their love of music. These are just some of the reasons why we now serve the children, and even grandchildren of our first customers.

*Alan Pinfis*  
Chairman.







# The ESL Legacy

For the past decade the Quad 2812 and 2912 Electrostatic Loudspeakers have been hailed by audiophiles and magazine experts alike as the best and most accurate loudspeakers available.

How, then, can Quad improve on the best? The answer is simple, by updating and refining the elements that make the Quad ESL the finest loudspeaker of its type.



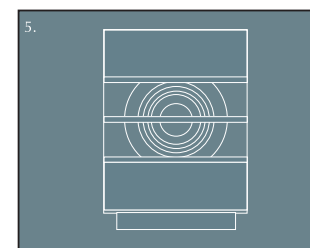
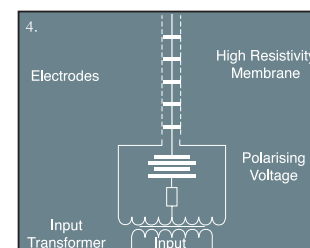
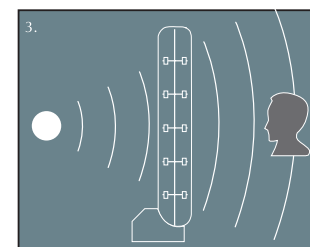
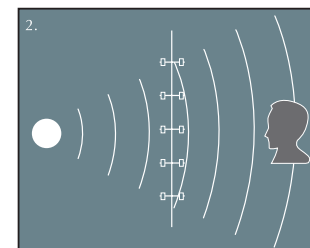
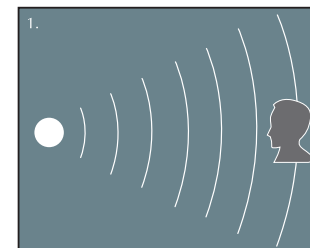
# Redefining Accuracy

Why the Quad ESL is able to reproduce music with accuracy far in advance of any other speaker? It's simply because of the moving part of the Quad ESL, the electrostatic diaphragm, which is a thin layer of stretched Mylar, ten times thinner than a human hair and so light that it approaches the mass of air to which it is coupled.

As a result there is no inertia inherent in the moving parts of the Quad ESL and the diaphragm is able to respond to musical detail and transients with unparalleled precision. The Quad ESL is one of the few speakers that can reproduce a 1kHz squarewave precisely and cleanly.

To achieve this astonishing feat the Quad ESL uses a system of highly charged stator elements on the either side of the diaphragm which is coupled to a power supply that produces the necessary 5kV of EHT (Extra High Tension) charge that controls the diaphragm.

How this extremely high voltage charge is produced and consistently maintained at the diaphragm to stator interface is the key to the low distortion of the ESL.







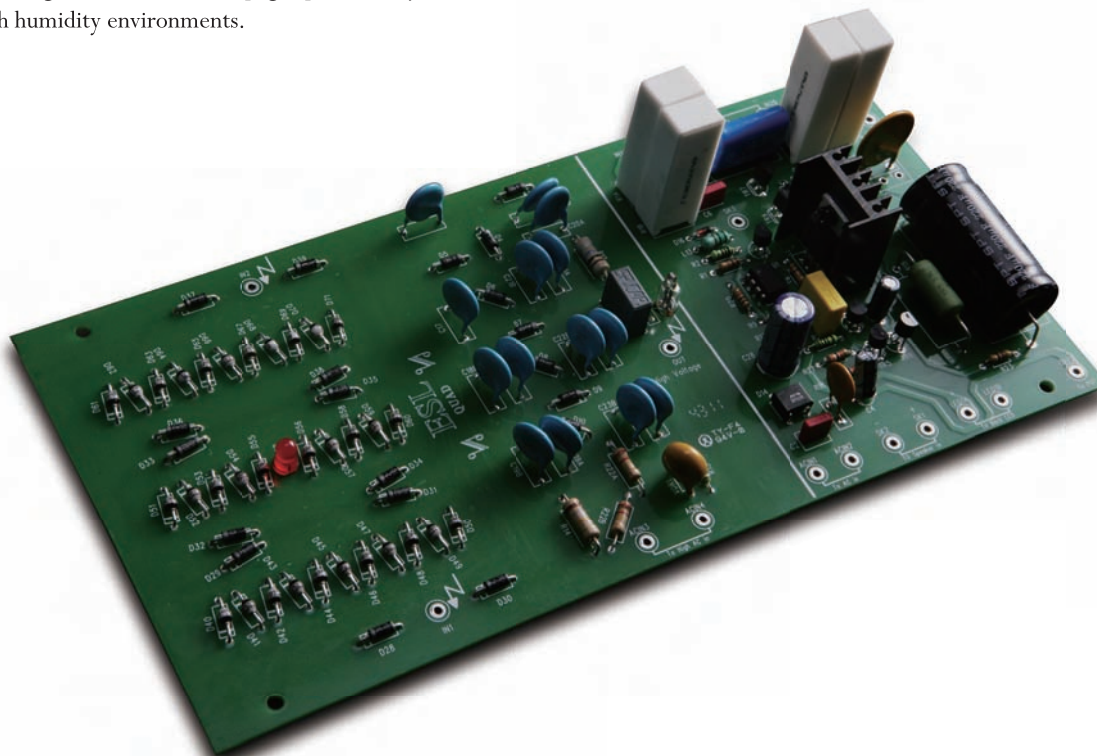




# Precision Engineering

To begin with, Quad's engineers evaluated the power supply for the EHT voltage. Creepage, the possibility of charge flowing across the PCB between components, was eliminated by a new PCB layout which ensured optimum insulation and distance between contacts and a symmetrical layout for the components. This new layout also provides a means to superior cable dressing, again reducing the effects of creepage, particularly in high humidity environments.

Component changes have also been introduced, including such audiophile components as Vishay resistors and Murata capacitors. Although not in the signal path, as such, these components have a direct effect on the consistency of the EHT supply and signal purity is created in the reproduction of music as a result.



# Attention to Details

Attention is paid on the power supply section, especially the stators. Each stator consists of a layer of copper on a thin, insulating backing which is punched with a pattern of holes to make it transparent to sound. The copper is etched to provide a conductive pattern which is necessary to re-create the point source attributes of the Quad ESL. After etching the copper needs to be insulated from the diaphragm, which will lie in close proximity to it.

In the 2812 and 2912, the insulation is created by a triple coating utilizing a specific spraying technique that is perfected to avoid degradation of the EHT charge under high dynamic conditions, where the diaphragm comes into close contact with the stator. These latest versions of the Quad ESL can thus play louder and handle more power than the previous models.





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# ESL

ELECTROSTATIC LOUDSPEAKERS



# Final Touches

Finally, to match the improved dynamics of the ESL elements, the mechanical aspects of the speakers have been enhanced. A new net cloth has been chosen to cover the elements which allows superior audio transparency as well as improving the appearance of the speakers. The underlying grille support has revised strengthening ribs to reduce the possibility of resonance as well as to ensure the grille cloth remains under tension but without stretch marks.

To distinguish the 2812 and 2912 from their predecessors, there are cosmetic changes too. These changes improve the look of the speakers in domestic surroundings. As well as the new grille cloth, there are matching piano lacquered veneered panels on the top of the speakers and the sides of the base formed from high density plywood to further damp frame resonances. The shielding cover on the base is embossed with the Quad logo and all typography is now in gold lacquer paint.

All in all the Quad ESL, ever a tour-de-force in the world of hi-fi loudspeakers, reaches its pinnacle in the 2812 and 2912. Worthy of discriminating audiophiles and music lovers everywhere, these new Quad ESLs provide extraordinary performance and offer an artistic statement, whether to look at or to listen to.





# Specifications



Model	ESL2812	ESL2912
General Description		
Format	Floor Standing Dipole With 3° Fixed Tilt	Floor Standing Dipole With 3° Fixed Tilt
Type	Multiple Electrostatic Drive Membranes	Multiple Electrostatic Drive Membranes
Time Delay	Progressive Concentric Rings	Progressive Concentric Rings
Chassis Structure	Heavy Duty Composite Aluminium / Steel	Heavy Duty Composite Aluminium / Steel
Panel Elements	4	6
Maximum Output	2 N/m² at 2m On Axis	2 N/m² at 2m On Axis
Sensitivity	1.5 mbar Per Volt Referred To 1m (86dB/2.83V rms Equivalent)	1.5 mbar Per Volt Referred To 1m (86dB/2.83V rms Equivalent)
Nominal Impedance	8 Ohms	8 Ohms
Impedance Variation	4 - 15 Ohms	4 - 20 Ohms
Maximum Input	Continuous Input Voltage (rms): 10V Programme Peak For Undistorted Output: 40V Permitted Peak Input: 55V	Continuous Input Voltage (rms): 10V Programme Peak For Undistorted Output: 40V Permitted Peak Input: 55V
Frequency Response	37Hz - 21kHz (-6dB) 33Hz - 23kHz (useable)	32Hz - 21kHz (-6dB) 28Hz - 23kHz (useable)
Directivity Index	See Polar Diagrams	See Polar Diagrams
Distortion (100dB @ 1m)	Above 1000Hz <0.15% Above 100Hz <0.5% Above 50Hz <1.0%	Above 1000Hz <0.15% Above 100Hz <0.5% Above 50Hz <1.0%
AC Input	220 - 240V, 110 - 120V, 100V	220 - 240V, 110 - 120V, 100V
Power Fuse	63mA anti-surge, 200 - 240V 100mA anti-surge, 100 - 120V	63mA anti-surge, 200 - 240V 100mA anti-surge, 100 - 120V
Power Consumption	6W	6W
Dimensions (H x W x D)	1070 x 690 x 380 (mm)	1470 x 690 x380 (mm)
Net Weight	35kg	44kg

\* The right is reserved to alter performance, specifications and appearance as required.



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