





ADVANCED DESIGN SPEAKER CABLE INCORPORATING AIRCORE<sup>™</sup>TECHNOLOGY

XT-300 XT-350 XT-400



# X-TUBE<sup>TM</sup> ADVANCED DESIGN SPEAKER CABLE

X-TUBE<sup>™</sup> is a genuine breakthrough in loudspeaker cable design. These superb new products deliver many of the attributes of our world-renowned Genesis Silver Spiral cables, but in a more affordable and easier to use form. X-TUBE is designed to be the natural upgrade for people using QED Silver Anniversary speaker cable or those simply seeking the very best performance from their hi-fi or Home Theatre system.

#### The X-TUBE Range Features Are:

Tubular conductor geometry - exhibits low inductance and capacitance from a large cross-sectional area cable. This results in a highly accurate signal transfer with superb transient performance and a precisely flat frequency response.

Aircore<sup>™</sup> technology - delivering lower flux density within the conductors than conventional cables, giving greater transparency to the sound.

Lower cable resistance - offering improved amplifier damping factor and lower distortion.

Compact dual conductor construction - for ease of termination.

#### X-TUBE With Aircore<sup>TM</sup> Technology:

One of the big problems as cable conductor size increases, is how to keep the inductance low. This is vital to reduce cable losses and prevent inaccuracies in the signal transfer process, i.e. distortion.

The normal way to do this is to use a number of individually insulated conductors within the cable construction. This method is utilised to great effect in the design of our Genesis Silver Spiral loudspeaker cables.

To take advantage of this design ethos, but in a more conventional format, X-TUBE forms the conductor in the shape of a tube with an inner aircore.

This has the same effect as using multiple insulated conductors and ensures that high frequencies are transmitted cleanly, with the added benefit of ease of termination. This unique tubular conductor geometry also provides lower flux density within the conductors, which gives improved transparency to the sound.

#### X-TUBE Construction:



### PEAKER CABLE S INCORPORATING AIRCORE<sup>TM</sup> TECHNOLOGY



#### How It Works:

#### Low Frequency Signal:

X-TUBE CABLE





The effect of this is to reduce the actual cross-sectional area of the cable at 15kHz to less than 75% of that at low frequencies. The result is induced distortion and a compromise in the performance of the cable.

X-TUBE with Aircore<sup>™</sup> technology exhibits much lower selfinductance and is therefore less affected by this problem. The use of an innovative Polyethylene aircore enables a reduction in loop inductance to levels only usually achievable by using more costly and difficult to terminate cables.

At low frequencies both X-TUBE™ and conventional stranded/solid core speaker cable convey signals in a linear way. This is represented by the uniform green colour of the strands shown in the diagram above.



#### High Frequency Signal:





Less Then 75% Conductor Usage

At higher frequencies X-TUBE retains a near-linear signal transfer, whereas the conventional stranded/solid core cable fails to efficiently conduct higher frequencies uniformly across the entire conductor area. The diagram shows excess current density at the periphery (designated in red) and rapidly deteriorating current density (green through to white) towards the centre of the conductor.









## X-TUBE<sup>TM</sup> Adversed Design Speedler Cables Incomparison Airport Topheology

 $\textbf{X-TUBE}^{{}^{\scriptscriptstyle{\mathsf{TM}}}} \textbf{Advanced Design Speaker Cables Incorporating Aircore}^{{}^{\scriptscriptstyle{\mathsf{TM}}}} \textbf{Technology}$ 





XT350 – Hybrid: Silver-Plated 99.999% Oxygen Free Copper (20%) and 99.999% Oxygen Free Copper (80%) stranded braid conductors, Polyethylene AirCore<sup>TM</sup>, Aluminium Mylar conductive wrap, PTFE tape wrap, PVC outer jacket 2 x 3.5mm<sup>2</sup> conductors. Dimensions 12.1 x 5.9 mm.

QED W XTUBE \* XT 350 SPOFC & OFC AirCore \*\* Technology Speaker Cable



XT400 – Silver-Plated 99.999% Oxygen Free Copper stranded braid conductors, Polyethylene AirCore<sup>TM</sup>, Copper Mylar conductive wrap, PTFE tape wrap, PVC outer jacket.  $2 \times 4.00$ mm<sup>2</sup> conductors. Dimensions 12.7 x 6.0 mm.



#### **QED AUDIO PRODUCTS LTD**

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