## ADVANCED INFORMATION **AE520**



The AE520 is Acoustic Energy's newest addition to the recently launched 500 Series. As the new range flagship, this slim-line floor-standing loudspeaker is ideal for medium to large sized rooms and features our newly developed carbon fibre tweeters and mid/bass drivers. These bespoke drivers are designed to match the pistonic power and accuracy of our legendary ceramic aluminium drivers but with improved self-damping for a smoother, more transparent sound.

Our 500 Series tweeter features a brand new 25mm carbon fibre dome. Carbon fibre is much lighter and better damped than other typical hard dome materials and provides a lightning fast, natural sound that will surprise the listener with its neutrality. The new cast aluminium WDT waveguide on the high frequency driver is positioned close to the mid/bass drivers for optimum dispersion and is extremely stiff to reduce vibration being passed to the tweeter, ensuring sweet, clear and natural highs.

The two dedicated 125mm carbon fibre mid-drivers include new oversized 35mm voice coils for low thermal compression and very high motor force factor. Both are mounted within their own dedicated sealed enclosure. The three dedicated low frequency drivers are reflex loaded by a large rear facing rectangular port. The vertical directivity has been optimised to give excellent vertical coverage whilst reducing the energy otherwise wasted on ceiling and floor reflections compared to traditional designs. The net result is a speaker offering much improved results than would be expected in acoustically poor rooms.

The crossover's low frequency section is mounted on its own PCB board to physically separate it from the mid and high frequency filters and minimise crosstalk between components. All signal path inductors are premium air core versions providing much lower distortion compared to iron core whilst the signal path capacitors are high-voltage metallised polypropylene wound film versions. The midrange motional impedance has been compensated to significantly reduce colouration in the lower midrange.

These unique drivers are housed in our 18mm Resonance Suppression Composite (RSC) cabinets, evolved from the prestigious Reference Series and featuring the same constrained layer composite to greatly reduce cabinet acoustic radiation, which would otherwise colour the sound.

Particular attention has been paid to achieving a more natural speech reproduction even at low levels, whilst still retaining the fast and exciting sound, Acoustic Energy loudspeakers are highly renowned for worldwide. Offering unparalleled dynamic power, matched to the fast controlled bass, crystal clear midrange and class leading tonality, the AE520 delivers a thrilling and powerful presentation discerning Acoustic Energy owners have come to expect for over 30 years.

The elegant slim-line cabinets are exquisitely finished in Piano Gloss Black, Piano Gloss White or American Walnut wood veneer options. Solid Aluminium bars are supplied to ensure rigid floor-coupling and maximum stability, whilst the stiffness of the metal structure reduces the room to speaker interaction.



## **AE520 Specifications**

- Drive Units: 125mm Carbon Fibre cones
- Tweeter: 25mm Carbon Fibre dome
- Bandwidth: 30Hz-28kHz (+/- 6dB) Sensitivity: 90dB
- Peak SPL: 113dB
- Power Handling: 300w
- Crossover Frequency: 373Hz / 2.8kHz
  Impedance: 6ohms
- Design: 3 way
- Dimensions: 1130 (with spikes) x 185 x 320 (HxWxD)
- Weight: 30Kg (per speaker)
- Finishes: Piano Black Gloss, Piano White Gloss and American Walnut wood veneer



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