



GROUP TEST

Two-and-a-half way floorstanding loudspeaker
Made by: Acoustic Energy Ltd, Gloucestershire
Supplied by: Acoustic Energy Ltd
Telephone: 01285 654432
Web: www.acoustic-energy.co.uk
Price: £999

AUDIO FILE

Acoustic Energy Radiance Two



The Radiance Series sits just below the Reference models in Acoustic Energy's line-up and is intended to offer a good proportion of their abilities at a lower price. The Radiance Two occupies the centre of the three-strong range of stereo designs (a matching subwoofer and centre channel are also available) and utilise three drive units in a two-and-a-half-way configuration.

The two main drivers are 130mm in diameter and consist of a pressed alloy cone with matching conical dust cap, allied to a rubber surround. Both feature voice-coils wound with aluminium wire for lightness and each driver has its own enclosure with separate port tuning.

Treble is handled by a ring radiator type tweeter, where the dome is anchored both around its edge and in the centre, for better controlled motion and reduced distortion. The tweeter is located in the centre of a newly designed waveguide that Acoustic Energy calls the DXT Lens. This is said to control the unit's output very precisely to maximise high frequency dispersion, improve off-axis performance and ensure a smooth frequency response. AE also claims that the technology used in the three drive units allows a simple crossover: the circuit has no resistors at all.

The cabinets of the Radiance Twos are impressively solid and surprisingly weighty given the compact dimensions. The rear profile is curved in order to minimise internal standing waves and four outrigger zinc alloy feet bolt securely to the base to increase its footprint and allow easy spike fitment. Sadly, these are not very pretty! Cabinet finishes are Natural and Dark Ash real wood veneers.

WEIGHTY SOUND TOO

The weighty nature of the Radiances' cabinets proved to be a surprisingly apt analogy for their

sound, as these loudspeakers offer a sense of authority, scale and confidence rare at the price.

Although the Lab Report suggests bass extension is a little limited, compared to, say, the Monitor Audios, I never felt this to be so in practice. Bass was punchy, taut and superbly detailed, gripping the fretless bass from the Paul Simon album by the scruff of the neck, and capturing the rhythms perfectly.

Most notable, however, was the astounding clarity and central image stability conferred onto female vocalists. With Nanci Griffith playing, I was immediately brought the impression of her face, larger than life, hovering directly between the cabinets. Backing instrumentation was expertly arranged behind the main performers and the treble was an absolute masterclass in clarity, detail and superlative crispness.

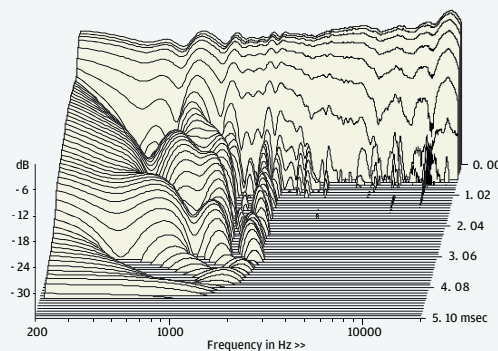
Sound Quality: 85%



LAB REPORT

Acoustic Energy claims 89dB sensitivity for the Radiance 2, which accords with our pink noise figure of 88.7dB. Nominally of 8ohm impedance, the Radiance Two has a minimum modulus of 3.7ohm, indicating that 4ohm nominal is more appropriate. Impedance phase angles are modest so EPDR (equivalent peak dissipation resistance) falls to 2.0ohm at 20Hz and 2.3ohm at a more relevant 470Hz, making this quite an easy load to drive.

The on-axis frequency response displays a rising trend, suggesting that best tonal balance will be heard a little off-axis, but response errors, 200Hz to 20kHz, are modest at ± 4.1 dB and ± 3.9 dB, and pair matching first class at ± 0.7 dB. Bass extension is fair at 56Hz (-6 dB re. 200Hz) but a gentle initial roll-off from 120Hz suggests that use near a back wall is envisaged. The cumulative spectral decay [see Graph] shows a fast initial energy decay and well controlled resonances. KH



Sensitivity (SPL/1m/2.83Vrms - Mean/IEC/Music)	90.3dB / 88.7dB / 88.3dB
Impedance modulus min/max (20Hz-20kHz)	3.7ohm @ 198Hz 13.0ohm @ 2.0kHz
Impedance phase min/max (20Hz-20kHz)	-28° @ 6.8kHz 35° @ 954Hz
Pair matching (200Hz-20kHz)	± 0.7 dB
LF/HF extension (-6 dB ref 200Hz/10kHz)	56Hz / >40kHz / >40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL at 1m)	0.3% / 0.2% / 0.1%
Dimensions (HWD)	920x185x255mm

