

5000 SERIES

**ACOUSTIC ENERGY**  
*for the love of music*

## Introduction

Congratulations on choosing the Acoustic Energy 500 Series. These are speakers of the highest fidelity; designed to reproduce music at its purest, most natural, most enjoyable.

Please take a little time to read through this manual and follow, as far as practical, the installation guidelines it contains. Careful installation will help ensure your 500 Series speakers perform optimally and offer many years of listening enjoyment.

Every component in your 500 Series speaker is new and bespoke to this range. From the high-power, low-distortion tonally-matched carbon fibre tweeters and bass-drivers to the RSC™ (Resonance Suppression Composite) cabinets. The aim being elimination of harmful distortion so nothing distracts from your listening pleasure.

### *Why carbon fibre?*

At Acoustic Energy we don't believe in technology for the sake of it, we only use something if it has a clear purpose and benefit. Traditionally we've used spun aluminium for our transducers because of its lightness and stiffness when working as a piston, giving a highly accurate reproduction of the source waveform. The benefit of carbon fibre is that it has similar pistonic properties to aluminium but in addition is both lighter, helping efficiency & transient response, and has improved self-damping; minimising cone/dome break-up harshness.

Should you have any questions not covered here or need more in-depth set-up advice we are happy to try and answer your queries either by telephone or email.

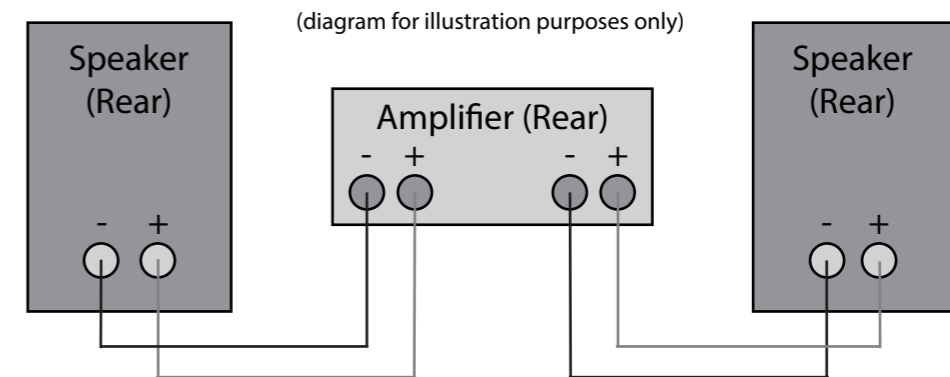
Contact information can be found on the back of this manual.

## Connections

**WARNING:** Check that your amplifier is switched off before installing your loudspeakers. Failure to do so may result in speaker or amplifier damage.

The positive cable from the amplifier positive (or red) terminal should connect with the positive (red) terminal on the loudspeaker. Similarly the negative cable should connect the amplifier negative terminal (black) to the negative terminal (black) on the loudspeaker.

After wiring up, lower the volume to the minimum, switch on the amplifier, select the signal source and then raise the volume to the listening level required whilst music is playing. If any distortion is heard turn the amplifier down until the distortion disappears. If distortion continues turn off the system and check connections again to make sure there are no problems such as bare wires touching each other.



If in any doubt with regards to connections or safety with your Hi-Fi system please contact the dealer from which you purchased your system for advice. You can also contact Acoustic Energy directly via email at: [info@acoustic-energy.co.uk](mailto:info@acoustic-energy.co.uk) or by phone on: (+44) 1285 654432.

## Positioning

The 500 Series are flexible speakers with regard to positioning and are designed to work well in most typical room layouts. There are however some basic guidelines that should be followed (where possible) for *optimum* performance.

The tweeters (smaller, high frequency drive units) should ideally be at ear level when the listener is seated and for serious listening the grilles are best removed, where practical.

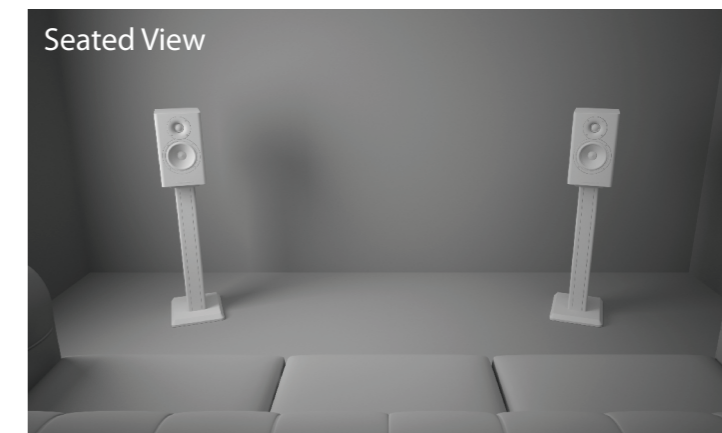
Rigid support is necessary for speakers to deliver their optimum dynamic response and detail; the AE509's come supplied with special aluminium bars and spiked feet for this purpose. The AE500's should ideally be used with Acoustic Energy Reference Stands or similar, high-quality support. Alternatively a solid surface such as a sturdy unit should prove adequate, though the use of mounting tack or specialist feet is recommended to decouple the speakers from the surface in this instance.

Room positioning: The 500 Series speakers are quite "room-friendly" and should be able to be placed where most convenient with minimal detriment to sound.

Where possible a minimum of 12" (30cm) should be allowed between the speakers and boundary walls; closer will increase bass response at the expense of timing and quality. Ideally the speakers will work best between 12-24" (30-60cm) from walls where the soundstage will open up and a more neutral balance will be achieved. If lacking bass, experiment moving the speakers closer to the rear wall until an optimal balance is found.

Example of typical in-room positioning:

1. Ideally an equilateral triangle will be formed between the seated listening position and the speakers.
2. Speakers usually perform better toed-in slightly, so the listener's eyeline looks down the inside edge of the cabinets; this minimises wall reflections and focuses the sound more at the listener. If the sound is too "sharp" in this position the speakers can be angled outwards more toward straight-ahead to lessen focus.
3. Placement too near side walls or corners should be avoided if possible, this will boost bass, causing "boom". Side walls also add midrange reflections, affecting balance and soundstaging.
4. All rooms have a large effect on sound, experimentation is the best way to find a sound that fits your personal taste.



## Specifications

AE500		AE509	
Sensitivity	87dB	Sensitivity	89dB
Bandwidth	45Hz-28kHz (+/- 6dB)	Bandwidth	32Hz-28kHz (+/- 6dB)
Peak SPL	113dB	Peak SPL	115dB
Maximum SPL	103dB	Maximum SPL	108dB
Impedance	6 ohms	Impedance	6 ohms
Pwr Handling	120W RMS	Pwr Handling	175W RMS
Crossover Frq	2.8kHz	Crossover Frq	560Hz/3.1kHz
Dimensions	310 x 185 x 260mm (HWD)	Dimensions	1050 x 185 x 280mm (HWD)
Weight	8kg (per speaker, unboxed)	Weight	22kg (per speaker, unboxed)

## Warranty

Your Acoustic Energy 500 Series loudspeakers are guaranteed against original defects in materials, manufacture and workmanship for 3 years from the date of purchase.

Please retain all original packaging materials for possible future use.

**If you register your Acoustic Energy 500 Series loudspeakers online via our website ([acoustic-energy.co.uk](http://acoustic-energy.co.uk)) we will extend your guarantee, free of charge, to five years.**

We suggest that you complete the details of purchase now and keep this information in a safe place for future reference.

Under this warranty Acoustic Energy agrees to repair any defect or, at the company's discretion, replace the faulty component(s) without charge for parts or labour.

This warranty does not imply any acceptance by Acoustic Energy Loudspeakers or its agents for consequential loss or damage and specifically excludes fair wear and tear, accident, misuse or unauthorised modification.

This warranty is applicable in the United Kingdom only and does not in any way limit the customer's legal rights. Claims and enquiries under the warranty for AE products purchased outside the UK should be addressed to the local importers or distributors.

If you have reason to claim under the warranty please contact your dealer in the first instance.

Dealer's name: \_\_\_\_\_

Date of purchase: \_\_\_\_\_

Serial numbers: \_\_\_\_\_

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