

AESPRIT
309

Owner's manual

AESPRIT
309

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ACOUSTIC ENERGY

Introduction

Congratulations on choosing the Acoustic Energy AESPRIT 309, a powerful floorstanding three-way loudspeaker which features metal diaphragm technology and is capable of outstanding performance. Please take a few moments to read this manual. The advice it contains will enable you to get the very best performance out of your Acoustic Energy loudspeakers.

The AESPRIT 309 utilises metal cone mid and bass drive unit technology, proven in the AE Reference series. The rigid anodised alloy cone ensures pure piston action and also acts as a heat sink for the bonded voice coil. These features provide exceptional clarity, transparency, dynamics and power handling. The units are housed within vented polymer chassis reducing stray magnetic flux to a minimum and increasing power handling.

The tweeter - or treble driver - is a high-quality neodymium unit with a silk fabric dome integrating smoothly with the rest of the system.

All drive units are fully magnetically shielded so that the speakers can be used in close proximity to a TV screen or monitor for AV applications.

The Acoustic Energy AESPRIT 309 loudspeaker uses quality OFC internal wiring, which enhances detail and transparency.

Positioning

Please unpack your **AESPRIT 309s** carefully. Locate the plinths and fittings and, having carefully inverted the speaker, screw the plinth to the base of the cabinet using the screws and pilot holes provided. Please take extra care during this operation, as the cabinet is top-heavy when inverted. Please also ensure that you have tightly screwed the plinth to the cabinet. Failure to do so will affect performance.

High tensile 8mm floor spikes and lock nuts are provided for use with the plinth. These guarantee optimum coupling to the floor particularly in rooms fitted with carpet. The spikes penetrate the carpet and couple the speaker firmly to the floor structure below. The spikes (with lock nut screwed down to the knurled part of the spike) should be fitted to the threaded insert in the underside of the plinth while the speaker is still inverted. The speaker is now ready for installation. Any final adjustment of spikes to eliminate cabinet wobble can now be made using a spirit level if required. The lock nuts should be tightened when the final adjustments to cabinet position and alignment have been made.

Closeness to room boundaries has a major impact on the low frequency performance. The speakers should be kept away from corners (which will produce booming) and there should be at least a 300-400mm (12-16 inch) gap from any back or side walls.

In the rear port of your AE309 you will find a foam bung. This has been supplied for tuning purposes to allow for differing room acoustics and positioning. Removal of this bung will give an increased bass output where required.

Experiment with the best position to achieve a full, yet clean bass response. Trust your judgement and ears. For serious listening the grilles are best removed.

For best stereo imaging the speakers should be as far apart as they are from the listening position.

Connection

Check that your amplifier is switched off before installing your loudspeakers. Failure to do so may result in speaker or amplifier damage. The diagram illustrates one loudspeaker only.

Conventional

Normal passive wiring requires shorting links to be in place between the treble/mid and bass sections. The positive (ribbed) cable from the amplifier positive (or red) terminal should connect with the positive (red) terminal on the loudspeaker. Similarly the negative (smooth) cable should connect the amplifier negative terminal (black) to the negative terminal (black) on the loudspeaker.

Bi-wiring

Bi-wiring separates the bass and treble ground paths in the loudspeaker and offer sound quality advantages. An extra set of cables is required. Note that the shorting links are removed between the treble/mid and bass sections and should be stored for later use if conventional, passive driving is required.

Two pairs of cables are connected to the amplifier terminals. One cable of each pair should connect to the treble/mid section and one to the bass section. The positive (ribbed) cables from the amplifier positive (or red) terminal should connect with the positive (red) terminals on the loudspeaker. Similarly the negative (smooth) cables in each pair should connect the amplifier negative terminal (black) to the negative terminals (black) on the loudspeaker.

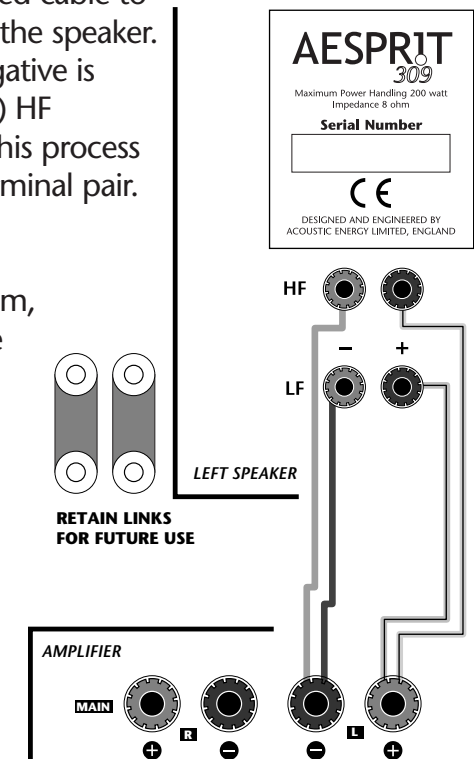
Bi-amping

Bi-amping adds a second amplifier to the system. One power amplifier drives the treble/mid section of both loudspeakers; a second drives the bass sections. **Note that the shorting links must be removed.** Failure to do so will result in damaging the amplifiers.

As regards the loudspeakers, wiring for bi-amping is achieved in much the same way as bi-wiring. Treble/mid amplifier positive (red) terminals should be connected via the ribbed cable to the positive (red) HF terminal on the speaker. Similarly, treble/mid amplifier negative is connected to the negative (black) HF terminal on the speaker. Repeat this process with the bass amplifier and LF terminal pair.

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.



Specifications

HF unit	Neodymium tweeter with high dispersion diaphragm. Ferro fluid cooled and damped. Magnetically shielded. Exclusively profiled.
MF unit	Pure piston 130 mm driver with 32 mm coil, polymer chassis, high power, long-throw magnet system and lightweight alloy cone. Magnetically shielded.
LF unit	Pure piston 130 mm driver with 32 mm coil, polymer chassis, high power, long-throw magnet system and lightweight alloy cone. Magnetically shielded.
Crossover	@ 175 Hz, 1st order LF @ 3.1 kHz, 3rd order MF @ 3.1kHz, 3rd order HF
Power Handling	200W max (undistorted program drive)
Frequency response ±6dB	37Hz to 23kHz
Frequency response ±3dB	43Hz to 20kHz
Sensitivity	90.5 dB/W
Impedance	8 ohm (4 ohm minimum)
Cabinet	Real wood veneered. 15 mm MDF wrap. Full circumferential brace. High power, low turbulence bass reflex port. 30 mm MDF front baffle. Mass loaded Gold-plated 4-way binding posts.
Terminals	
Weight (excl. packaging and plinth)	18kg each
Dimensions (WxHxD)	210 x 920 x 305 mm

Warranty

Your Acoustic Energy 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. We suggest that you complete 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 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:.....

Address:.....

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Date of purchase:.....

Serial numbers:.....

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